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A Compendium of Lake and Reservoir Data Collected by the National Eutrophication Survey in the Western United States

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A COMPENDIUM OF LAKE AND RESERVOIR DATA COLLECTED BY THE NATIONAL EUTROPHICATION SURVEY IN THE WESTERN UNITED STATES

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16. ABSTRACT

Morphometric, limnological, and nutrient loading data are summarized for 153 lakes and reservoirs studied during 1974-1975 by the U.S. Environmental Protection Agency's National Eutrophication Survey. The water bodies for which data are summarized are located in the states of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

17. KEY WORDS AND DOCUMENT ANALYSIS

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INTRODUCTION

The National Eutrophication Survey (NES) was initiated in 1972 by the U.S. Environmental Protection Agency (EPA) to investigate the nationwide threat of accelerated eutrophication to freshwater lakes and reservoirs. In conjunction with State environmental agencies, the Survey developed information on nutrient sources, inputs, and impacts on selected freshwater lakes and reservoirs throughout the contiguous United States. In total, over 800 lakes and reservoirs, 4,200 tributaries and lake outlets, and 1,000 sewage treatment plants were included in the sampling programs which involved a joint field effort by EPA personnel, the National Guard of each State, operators of municipal and industrial waste treatment plants, and personnel of the respective State agency responsible for water pollution control activities. For details of the procedures and methods used in the geographical area encompassed in this report, refer to NES Working Paper No. 175, "National Eutrophication Survey Methods, 1973-1976".

One of the primary outputs of the NES program is the individual lake or reservoir report in which are summarized the trophic condition; the nutrient sources, loads, and controllability; and the limiting nutrient. Each report also includes all of the NES data pertaining to the water body, the drainage area, and the nutrient point sources. To make the NES data accessible to many users, data in each lake report have been summarized and compiled in this report which includes information on the water bodies sampled during the fourth year of the Survey

(1975). Geographically, this compendium includes data on lakes and reservoirs in Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

Compendia of data on water bodies in other areas of the U.S. have been prepared. Working Paper No. 474 includes data on water bodies sampled in 1972 (northeast and part of north-central U.S.); Working Paper No. 475 provides data on water bodies sampled in 1973 (eastern, north-central, and southeastern States); and Working Paper No. 476 includes the data obtained in 1974 (central and plains States).

COMPENDIUM COMPONENTS

In the compendium heading for each water body, the identifiers are given (NAME, STATE, principal COUNTY, STORET NO., WORKING PAPER NO., and NTIS ACCESSION NO.). Following the NAME, the trophic condition of the water body is shown in parentheses.

The trophic condition is based on an assessment of the data collected during the sampling year supplemented by results of past studies, if any, and communications with State personnel. Each water body was categorized as "OLIGOTROPHIC" (low nutrient levels and productivity), "MESOTROPHIC" (moderate nutrient levels and productivity), "EUTROPHIC (high nutrient levels and productivity), or "HYPEREUTROPHIC" (very high nutrient levels and productivity). For large water bodies, two or more trophic categories maybe indicated; e.g., the major tributary embayments (nearest the nutrient sources) may be eutrophic while the main portion of the water body is mesotrophic.

Following the heading, the data are arranged in five categories:

I. MORPHOMETRY
II. PHYSICAL AND CHEMICAL CHARACTERISTICS
III. BIOLOGICAL CHARACTERISTICS
IV. NUTRIENT LOADING CHARACTERISTICS
V. NON-POINT SOURCE NUTRIENT EXPORT

Each of these categories contains related information as discussed below. If data were not obtained, a series of asterisks is shown.

I. MORPHOMETRY

The morphometric data were compiled from the literature and/or from information provided by State and Federal personnel.

LAKE TYPE - either of NATURAL origin or resulting from stream IMPOUNDMENT.

DRAINAGE AREA (SQ KM) - the total drainage area (measured to the outlet) in square kilometers.

SURFACE AREA (SQ KM) - the area of the water surface in square kilometers.

MEAN DEPTH (METERS) - the volume of the water body, in cubic meters, divided by the surface area in square meters.

TOTAL INFLOW (CMS) - the mean of the inflows of all tributaries and the immediate drainage in cubic meters per second.

RETENTION TIME (YEARS or DAYS) - a mean value determined by dividing the lake volume, in cubic meters, by the mean annual outflow in cubic meters per unit of time. Note that the outflow maybe less than the total inflow because of evaporation; withdrawals for irrigation, public water supply, or other uses are included in the outflow.

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

These data are based on the sampling of each water body in the spring, summer, and fall of 1975. Depending on size, from one to many

sites were sampled, and multiple depths usually were sampled at each site. For every parameter in this category, except Secchi disc depth, the median value is reported. The median represents the middle value of all sampling stations, times, and depths. The mean of the SECCHI DISC depths at all stations and all sampling times is given.

MEDIAN ALKALINITY (MG/L) - total alkalinity, as $CaCO_3$, in milligrams per liter.

MEDIAN CONDUCTIVITY (UMHOS) - specific conductance at 25°C in micromhos per centimeter.

MEAN SECCHI DISC (METERS) - the mean limit of visibility of a standard Secchi disc in meters.

MEDIAN TOTAL PHOSPHORUS (MG/L) - as P in milligrams per liter.

MEDIAN DISSOLVED PHOSPHORUS (MG/L) - as P in milligrams per liter.

MEDIAN INORGANIC NITROGEN (MG/L) - nitrate + nitrite + ammonia, as N, in milligrams per liter.

MEDIAN TOTAL NITROGEN (MG/L) - Kjeldahl nitrogen + nitrate + nitrite, as N.

III. BIOLOGICAL CHARACTERISTICS

MEAN CHLOROPHYLL A (UG/L) - the mean concentration of all samples, in micrograms per liter.

ALGAL ASSAY CONTROL YIELDS (MG/L-DRY WT) - for most of the water bodies are based on two or more values, in milligrams per liter dry weight, obtained from samples collected during the first (spring) and last (fall) samplings. If more than one sample was taken, the values shown represent the range of yields, and the number following in parentheses indicates the number of samples assayed. The test organism was Selenastrum capricornutum Printz.

LIMITING NUTRIENT (no units) - may be determined by two procedures which are (1) the growth response of Selenastrum capricornutum to the addition of various amounts of phosphorus or nitrogen or (2) the ratio of inorganic nitrogen to dissolved phosphorus determined from the sampling data. When the inorganic nitrogen

to dissolved phosphorus ratio is 14/1 or greater, the water body is considered phosphorus limited, whereas ratios of less than 14/1 are considered indicative of nitrogen limitation.

The LIMITING NUTRIENT at each sampling time is given. Except for the first and last sampling dates, the limiting nutrient is based on N/P ratios. The limiting nutrient for the first and last sampling date generally is based on algal assay results. However, if no value is shown for the ALGAL ASSAY CONTROL YIELD, the limiting nutrient for those dates is determined by the N/P ratio. Where "ND" is shown, nutrient data were not obtained, and the limiting nutrient cannot be determined.

SUMMARY OF PHYTOPLANKTON DATA - the COUNT of individuals, filaments, or colonies per milliliter of sample for each of the five most numerous genera on the date shown. The sum of the units of other genera present in the sample, but not specified, is also included.

IV. NUTRIENT LOADING CHARACTERISTICS

Nutrient loads of significant tributaries and the water body outlet(s) were calculated using the results of analyses of from 12 to 14 samples collected from each stream by the State National Guard monthly for a one-year period and stream flow estimates as provided by the U.S. Geological Survey through an interagency agreement. The nutrient loads of the unsampled portion of the drainage areas were estimated from the measured nutrient loads in the sampled streams in the area. Nutrient loads of all streams and the unsampled drainage area were estimated on the basis of a year of average or "normal" stream flow to minimize the influence of extreme hydrological events that may have occurred during the sampling year.

Sewage treatment plant nutrient loads were determined from results of analyses of from 5 to 14 monthly effluent samples and corresponding flow data provided by plant operators or by State agency personnel. For sewage treatment plants which were not sampled and those from which fewer than five samples were received, nutrient discharges were estimated on the basis of the population served by the facility.

For details of sampling procedures and methods of calculation, refer to NES Working Paper No. 175.

A. INPUT - an estimate of all external inputs of nitrogen and phosphorus to the water body.

POINT SOURCE MUNICIPAL (KG/YR) - an estimate of annual nitrogen and phosphorus inputs from municipal sewage treatment plants in kilograms per year.

POINT SOURCE INDUSTRIAL (KG/YR) - an estimate of annual nitrogen and phosphorus inputs from industrial waste treatment plants in kilograms per year.

POINT SOURCE SEPTIC TANKS (KG/YR) - an estimate of annual nitrogen and phosphorus inputs from septic tanks within approximately 90 meters of the shoreline in kilograms per year. If a value is shown for nitrogen but not phosphorus, the estimated phosphorus input was less than 5 kg.

NON-POINT SOURCE (KG/YR) - an estimate of the annual nitrogen and phosphorus inputs from tributaries, immediate drainage, and precipitation in kilograms per year.

TOTAL LOADING (KG/YR) - the sum of all external nitrogen and phosphorus inputs.

LAKE SURFACE AREA LOADING RATE (G/SQ M/YR) - the total loading for the sampling year divided by the lake surface area ($\frac{kg/yr}{km^2} \times 10^{-3}$) in grams per square meter of surface area per year.

B. OUTPUT - an estimate of the annual nitrogen and phosphorus discharged through the lake OUTLET(S) (KG/YR) in kilograms per year. Asterisks indicate little or no outlet flow (and output) during the sampling year.

PERCENT RETENTION - the percentage of incoming nitrogen or phosphorus retained in the lake annually:

$$\left(\frac{\text{Input load-output load}}{\text{input load}} \times 100\%\right).$$

V. NON-POINT SOURCE NUTRIENT EXPORT

STREAM NAME -

MEAN FLOW (CMS) - the mean stream flow in a year of average hydrology in cubic meters per second.

DRAINAGE AREA (SQ KM) - the drainage area of the stream in square kilometers.

MEAN TOTAL P (MG/L) - the mean concentration of total phosphorus in the stream at the sampling site during the year of sampling.

MEAN TOTAL N (MG/L) - the mean concentration of total nitrogen in the stream at the sampling site during the year of sampling.

TOTAL P EXPORT (KG/SQ KM/YR) - the total phosphorus load of the stream (after subtracting known point-source loads) divided by the drainage area, in kilograms per square kilometer per year. Asterisks indicate the phosphorus was less than 0.1 kg if a value is shown for nitrogen.

TOTAL N EXPORT (KG/SQ KM/YR) - the total nitrogen load of the stream (after subtracting known point-source loads) divided by the drainage area, in kilograms per square kilometer per year.

AVAILABILITY OF WORKING PAPERS

Compendium users desiring more detailed information may obtain a copy of the report on the water body of interest. Requests to the National Eutrophication Survey should include the NAME of the water body and the WORKING PAPER NO. as shown in the compendium heading.

Requests may be addressed to:

National Eutrophication Survey, EPA
Corvallis Environmental Research Laboratory
200 S.W. 35th Street
Corvallis, OR 97330

Only limited numbers of the Working Papers can be provided by NES. When these are exhausted, Working Papers can be obtained from:

National Technical Information Service
Department of Commerce
Springfield, VA 22161

The NTIS accession number is shown in the compendium heading. A blank or a series of zeros indicates numbers that were not available at the time of this printing; these accession numbers can be obtained from NES at the address shown on page 7.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ARIZONA

NAME - BIG LAKE (EUTROPHIC)
COUNTY - APACHE
STORET NO. - 0401 WORKING PAPER NO. 726. NTIS ACCESSION NO. PB-279 258/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	1.94	4.4	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
77.	101.	2.9	0.032	0.007	0.090	0.820

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
2.9	0.2 - 9.5 (2)	(6/19/75) N	(10/ 6/75) N

SUMMARY OF PHYTOPLANKTON DATA

6/19/75 GENERA	COUNT	10/ 6/75 GENERA	COUNT
CRYPTOMONAS	92	APHANOTHECE	480
SCHROEDERIA	23	MELOSIRA	137
CYSTS	23	CHROOMONAS	137
TRACHELOMONAS	23	ASTERIONELLA	69
EUGLENA	23	COELOSPHAERIUM	69
OTHER	0	OTHER	113
TOTAL	184	TOTAL	1005

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTHOPHICATION SURVEY LAKES IN ARIZONA

NAME - FOOLS HOLLOW LAKE (EUTROPHIC)
COUNTY - NAVAJO
STORET NO. - 0402 WORKING PAPER NO. 727. NTIS ACCESSION NO. PB-279 256/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	282.30	0.57	7.0	0.080	31.4

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
81.	152.	0.8	0.059	0.014	0.090	0.640

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
10.7	0.3 - 13.0 (2)	(3/ 4/75) N	(6/19/75) N	(10/ 6/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 4/75 GENERA	COUNT	6/19/75 GENERA	COUNT	10/ 6/75 GENERA	COUNT
CHROOMONAS	2587	MELOSIRA	1681	MELOSIRA	7673
CRYPTOMONAS	1053	COELASTRUM	193	APHANIZOMENON	310
CYCLOTELLA	511	OOCYSTIS	193	TRACHELOMONAS	194
MELOSIRA	421	CRYPTOMONAS	154	CRYPTOMONAS	116
FLAGELLATES	391	SCENEDESMUS	135	ANKISTRODESMUS	116
OTHER	1142	OTHER	696	OTHER	466
TOTAL	6105	TOTAL	3052	TOTAL	8875

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	65.	**********	5.	145.	215.
NITROGEN	140.	**********	140.	3565.	3845.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	0.38
NITROGEN	**********	*****	6.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SHOW LOW CREEK (A2)	0.060	239.6	0.052	1.417	0.4	9.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
SHOW LOW CREEK (A3)	0.064	1.219
UNNAMED CREEK (H1)	0.230	1.265
UNNAMED CREEK (C1)	0.067	1.257

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ARIZONA

NAME - LAKE HAVASU (MESOTROPHIC)
COUNTY - MOHAVE, AZ: SAN BERNADINO, CA
STORET NO. - 0403 WORKING PAPER NO. 728, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	463091.80	77.30	9.2	306.020	32.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
136.	995.	2.0	0.015	0.005	0.170	0.540

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(2/27/75) P	(6/13/75) P	(11/19/75) P
3.9	0.1 - 0.3 (4)			

SUMMARY OF PHYTOPLANKTON DATA

2/27/75 GENERA	COUNT	6/13/75 GENERA	COUNT	11/19/75 GENERA	COUNT
OSCILLATORIA	495	FRAGILARIA	514	RAPHIDIOPSIS	624
CHROOMONAS	180	CYCLOTELLA	206	CRYPTOMONAS	381
CRYPTOMONAS	90	TRACHELOMONAS	128	CYCLOTELLA	173
SYNEDRA	90	CHROOMONAS	103	CHROOMONAS	139
CYCLOTELLA	90	OOCYSTIS	77	LYNGBYA	139
OTHER	45	OTHER	128	OTHER	276
TOTAL	990	TOTAL	1156	TOTAL	1732

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	7490.	**********	25.	274205.	281720.
NITROGEN	19060.	**********	1015.	8054025.	8074100.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	190275.	32.	3.64
NITROGEN	7826805.	3.	104.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
COLORADO RIVER	305.290	446256.8	0.036	0.831	0.6	18.
GENE WASH	0.010	17.6	0.021	0.603	0.3	12.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
COLORADO RIVER AQUEDUCT	0.036	0.862
HILL WILLIAMS RIVER	0.026	1.275

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ARIZONA

NAME - LUNA LAKE
COUNTY - APACHE
STORET NO. - 0404

(EUTROPHIC)

WORKING PAPER NO. 729. NTIS ACCESSION NO. PB-281 462/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	93.50	0.30	2.5	0.110	107.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
97.	220.	2.6	0.182	0.131	0.050	0.720

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
3.4	6.2 - 13.3 (2)	(4/30/75) N	(6/18/75) N	(10/ 6/75) N

SUMMARY OF PHYTOPLANKTON DATA

4/30/75 GENERA	COUNT	6/18/75 GENERA	COUNT	10/ 6/75 GENERA	COUNT
CRYPTOMONAS	2990	OSCILLATORIA	420	CRYPTOMONAS	34
CHROOMONAS	1627	ANABAENA	262	OSCILLATORIA	34
CYCLOTELLA	308	FRAGILARIA	210	NITZSCHIA	34
SYNEDRA	132	APHANIZOMENON	105		
ANKISTRODESMUS	88	CRYPTOMONAS	105		
OTHER	44	OTHER	0	OTHER	0
TOTAL	5189	TOTAL	1102	TOTAL	102

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	105.	**********	**********	465.	570.
NITROGEN	285.	**********	**********	4240.	4525.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	540.	5.	1.90
NITROGEN	2320.	49.	15.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SAN FRANCISCO RIVER	0.100	75.4	0.165	0.992	5.	42.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ARIZONA

NAME - LYMAN LAKE
COUNTY - APACHE
STORET NO. - 0405

(EUTROPHIC)

WORKING PAPER NO. 730. NTIS ACCESSION NO. PB-281 570/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	2046.10	5.67	6.7	0.800	2.4

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
169.	307.	0.4	0.099	0.056	0.060	0.430

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/30/75) N	(6/19/75) N	(10/ 6/75) N
2.6	5.8 - 8.6 (2)			

SUMMARY OF PHYTOPLANKTON DATA

4/30/75 GENERA	COUNT	6/19/75 GENERA	COUNT	10/ 6/75 GENERA	COUNT
CRYPTOMONAS	62	CHROOMONAS	234	CHROOCOCCUS	276
COCCONEIS	31	STEPHANODISCUS	39	CHROOMONAS	184
NITZSCHIA	31			STEPHANODISCUS	46
PHACUS	31			CRYPTOMONAS	46
				ANABAENA	46
OTHER	0	OTHER	0	OTHER	45
TOTAL	155	TOTAL	273	TOTAL	643

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1425.	**********	**********	8300.	9725.
NITROGEN	3535.	**********	35.	44355.	47925.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3445.	65.	1.72
NITROGEN	43090.	10.	8.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LITTLE COLORADO RIVER	0.730	1934.7	0.328	1.516	4.	19.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ARIZONA

NAME - LAKE MOHAVE (MESOTROPHIC)
COUNTY - MOHAVE, AZ: CLARK, NV
STORET NO. - 0406 WORKING PAPER NO. 731, NTIS ACCESSION NO. PB-282 827/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	438486.80	105.63	18.9	314.950	73.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
137.	884.	3.3	0.017	0.010	0.240	0.600

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
4.4	0.2 - 0.5 (5)	(2/26/75) P	(6/12/75) P	(12/ 2/75) P

SUMMARY OF PHYTOPLANKTON DATA

2/26/75 GENERA	COUNT	6/12/75 GENERA	COUNT	12/ 3/75 GENERA	COUNT
CYCLOTELLA	802	CHROOMONAS	401	CHROOMONAS	378
CHROOMONAS	698	CYSTS	218	RAPHIDIOPSIS	310
OSCILLATORIA	419	OOCYSTIS	182	CYCLOTELLA	206
CRYPTOMONAS	349	FRAGILARIA	146	SCENEDESMUS	103
SYNEDRA	314	CERATIUM	36	SYNEDRA	69
OTHER	0	OTHER	37	OTHER	69
TOTAL	2582	TOTAL	1020	TOTAL	1135

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	252955.	252960.
NITROGEN	**********	**********	175.	12216250.	12216425.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	203395.	20.	2.39
NITROGEN	8797855.	28.	115.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
COLORADO RIVER	314.740	434601.8	0.033	2.016	0.6	28.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ARIZONA

NAME - LAKE PLEASANT (EUTROPHIC)
COUNTY - MARICOPA, YAVAPAI
STORET NO. - 0407 WORKING PAPER NO. 732, NTIS ACCESSION NO. PB-281 402/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	14.16	13.7	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
173.	492.	1.3	0.027	0.004	0.040	0.520

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
9.8	0.4 - 1.5 (2)	(3/ 5/75) P	(6/17/75) N	(11/17/75) P

SUMMARY OF PHYTOPLANKTON DATA

3/ 5/75 GENERA	COUNT	6/17/75 GENERA	COUNT	11/15/75 GENERA	COUNT
PERIDINIUM	540	CENTRIC DIATOM	804	DACTYLOCOCCOPSIS	1518
ANKISTRODESMUS	295	TETRAEDRON	739	TETRASTRUM	875
CHROOMONAS	147	MELOSIRA	565	MELOSIRA	875
CRYPTOMONAS	98	DACTYLOCOCCOPSIS	544	NITZSCHIA	669
MELOSIRA	98	CRUCIGENIA	261	CRUCIGENIA	437
OTHER	198	OTHER	1239	OTHER	3188
TOTAL	1376	TOTAL	4152	TOTAL	7562

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ARIZONA

NAME - LAKE POWELL (OLIGOTROPHIC--MESOTROPHIC)
COUNTY - COCONINO, AZ; GARFIELD, KANE, SAN JUAN, UT
STORET NO. - 0408 WORKING PAPER NO. 733, NTIS ACCESSION NO. PB-281 514/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	279459.00	653.16	51.0	393.800	2.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
130.	580.	4.5	0.010	0.009	0.410	0.600

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
2.8	0.1 - 4.0 (12)	(4/15/75) P	(8/14/75) P	(12/ 2/75) P

SUMMARY OF PHYTOPLANKTON DATA

4/16/75 GENERA	COUNT	8/14/75 GENERA	COUNT	12/ 1/75 GENERA	COUNT
CHROOMONAS	513	FRAGILARIA	816	CHROOMONAS	486
FRAGILARIA	428	CHROOMONAS	371	FRAGILARIA	333
CRYPTOMONAS	257	CENTRIC DIATOM	185	CRYPTOMONAS	26
GLENODINIUM	29	NAVICULA	148	TETRAEDRON	26
		SKELETONEMA	148	SCENEDESMUS	26
OTHER	0	OTHER	279	OTHER	0
TOTAL	1227	TOTAL	1947	TOTAL	897

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ARIZONA

NAME - RAINBOW LAKE (EUTROPHIC)
COUNTY - NAVAJO
STORET NO. - 0409 WORKING PAPER NO. 734. NTIS ACCESSION NO. PB-281 518/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	26.20	0.32	4.6	0.290	171.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
118.	179.	1.5	0.046	0.009	0.045	0.620

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
16.4	4.0 - 4.8 (2)	(3/ 4/75) N	(6/19/75) N	(10/ 1/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 4/75 GENERA	COUNT	6/19/75 GENERA	COUNT	10/ 6/75 GENERA	COUNT
CYCLOTELLA	52327	FRAGILARIA	17976	FRAGILARIA	3821
CHROOMONAS	706	EPITHEMIA	618	CHROOMONAS	303
CRYPTOMONAS	680	CRYPTOMONAS	353	CRYPTOMONAS	243
OOCYSTIS	419	CHROOMONAS	265	EPITHEMIA	121
ANKISTRODESMUS	419	COCCONEIS	132	COCCONEIS	30
OTHER	1125	OTHER	398	OTHER	62
TOTAL	55676	TOTAL	19742	TOTAL	4580

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	10.	**********	10.	675.	695.
NITROGEN	340.	**********	435.	10595.	11370.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	340.	51.	2.17
NITROGEN	6000.	47.	35.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WALNUT CREEK	0.250	21.8	0.074	1.012	26.	396.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
TROUT CREEK	0.060	1.147
GOOSEBERRY CREEK	0.061	0.767

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ARIZONA

NAME - THEODORE ROOSEVELT LAKE (MESOTROPHIC)
COUNTY - GILA
STORET NO. - 0410 WORKING PAPER NO. 735. NTIS ACCESSION NO. PB-281 516/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	15084.20	60.70	28.0	31.960	1.9

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
124.	795.	1.8	0.020	0.008	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
4.1	0.2 - 1.7 (4)	(3/ 4/75) N	(6/17/75) N	(11/18/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 5/75 GENERA	COUNT	6/17/75 GENERA	COUNT	11/18/75 GENERA	COUNT
CHROOMONAS	1343	PENNATE DIATOMS	488	CHROOMONAS	639
DACTYLOCOCCOPSIS	564	TETRAEDRON	234	KIRCHNERIELLA	486
CRYPTOMONAS	322	ANKISTRODESMUS	195	DACTYLOCOCCOPSIS	256
GLENODINIUM	161	CHROOMONAS	156	SCENEDESMUS	102
ANKISTRODESMUS	54	ANABAENOPSIS	117	FRAGILARIA	102
OTHER	189	OTHER	313	OTHER	563
TOTAL	2633	TOTAL	1503	TOTAL	2148

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	15050.	**********	**********	111440.	126490.
NITROGEN	47245.	**********	**********	630815.	678060.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	22380.	82.	2.08
NITROGEN	401180.	41.	11.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SALT RIVER	25.010	11152.5	0.142	0.574	9.	42.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
PINAL CREEK	0.110	0.879
PINTO CREEK	0.828	1.518
SALOME CREEK	0.026	0.421
TONTO CREEK	0.061	0.529

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ARIZONA

NAME - SAN CARLOS RESERVOIR (EUTROPHIC)
COUNTY - GILA, GRAHAM, PINAL
STORET NO. - 0411 WORKING PAPER NO. 736. NTIS ACCESSION NO. PB-281 517/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	33374.70	52.61	15.3	12.220	2.9

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
161.	1258.	0.6	0.056	0.009	0.060	0.520

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
14.8	0.4 - 0.8 (2)	(3/ 4/75) N	(6/18/75) N	(11/18/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 4/75 GENERA	COUNT	6/18/75 GENERA	COUNT	11/18/75 GENERA	COUNT
ANKISTRODESMUS	2045	LYNGBYA	2463	CHROOMONAS	6312
CRYPTOMONAS	1402	CARTERIA	1351	DACTYLOCOCCOPSIS	207
DACTYLOCOCCOPSIS	584	DACTYLOCOCCOPSIS	530	EUGLENA	89
KIRCHNERIELLA	467	CENTRIC DIATOM	424	MESOSTIGMA	59
CHROOMONAS	380	CERATIUM	265	CHLAMYDOMONAS	59
OTHER	1256	OTHER	1191	OTHER	327
TOTAL	6134	TOTAL	6224	TOTAL	7053

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1565.	**********	**********	490415.	491980.
NITROGEN	3680.	**********	**********	1073140.	1076820.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	10165.	98.	9.35
NITROGEN	239960.	78.	20.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
GILA RIVER	10.090	29707.3	0.222	2.040	15.	31.
SAN CARLOS RIVER	1.620	2659.3	0.283	1.132	8.	22.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LAKE AMADOR (EUTROPHIC)
COUNTY - AMADOR
STORET NO. - 0601 WORKING PAPER NO. 739. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	151.30	1.56	17.4	1.236	261.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
73.	175.	2.3	0.040	0.020	0.390	0.680

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
22.4	6.7	(3/14/75) P	(6/26/75) P	(11/12/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/14/75 GENERA	COUNT	6/26/75 GENERA	COUNT	11/12/75 GENERA	COUNT
CENTRIC DIATOM	68733	FRAGILARIA	5304	MELOSIRA	1064
CHROOMONAS	561	SCENEDESMUS	3700	CHROOMONAS	172
ASTERIONELLA	421	CHROOMONAS	1375	GLENODINIUM	144
STEPHANODISCUS	224	CRYPTOMONAS	360	CRYPTOMONAS	144
MELOSIRA	112	PERIDINIUM	262	CERATIUM	29
OTHER	112	OTHER	361	OTHER	28
TOTAL	70163	TOTAL	11362	TOTAL	1581

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2610.	••••••••••	••••••••••	1205.	3815.
NITROGEN	8065.	••••••••••	••••••••••	71915.	79980.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1800.	53.	2.45
NITROGEN	68335.	15.	51.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
JACKSON CREEK	0.899	109.8	0.301	1.904	8.	469.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - BOCA RESERVOIR (OLIGOTROPHIC)
COUNTY - NEVADA
STORET NO. - 0602 WORKING PAPER NO. 740. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	445.50	3.97	12.8	6.024	112.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
37.	50.	3.2	0.012	0.003	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
1.7	0.2 - 0.8 (2)	(6/ 9/75) N	(6/30/75) P	(11/ 4/75) P

SUMMARY OF PHYTOPLANKTON DATA

6/ 9/75 GENERA	COUNT	6/30/75 GENERA	COUNT	11/ 4/75 GENERA	COUNT
TABELLARIA	120	CHROOMONAS	114	TABELLARIA	646
OSCILLATORIA	90	STEPHANODISCUS	57	FRAGILARIA	258
CHROOMONAS	90	ASTERIONELLA	57	CHROOMONAS	194
CENTRIC DIATOM	60	TABELLARIA	28	CRYPTOMONAS	161
MELOSIRA	60			ASTERIONELLA	129
OTHER	62	OTHER	0	OTHER	0
TOTAL	482	TOTAL	256	TOTAL	1388

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	3380.	3380.
NITROGEN	**********	**********	**********	78165.	78165.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2675.	21.	0.85
NITROGEN	72570.	7.	19.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LITTLE TRUCKEE RIVER	5.010	378.1	0.017	0.353	6.	133.
DRY CREEK	0.367	16.1	0.019	0.439	11.	318.
EAST BOCA CANYON CREEK	0.139	6.0	0.061	0.887	78.	1546.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LAKE BRITTON (EUTROPHIC)
COUNTY - SHASTA
STORET NO. - 0603 WORKING PAPER NO. 741. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	11929.50	5.12	9.8	97.520	6.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
74.	135.	1.3	0.067	0.047	0.115	0.315

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
4.8	6.2 - 7.6 (2)	(3/26/75) N	(7/14/75) N	(11/ 3/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/26/75 GENERA	COUNT	7/14/75 GENERA	COUNT	11/ 3/75 GENERA	COUNT
CENTRIC DIATOM	189	MELOSIRA	1000	FRAGILARIA	138
CHROOMONAS	54	ANABAENA	437	OOCYSTIS	79
		SYNEDRA	219	CHAETOCEROS	39
		FRAGILARIA	125	CHROOMONAS	39
		CHROOMONAS	125	CRYPTOMONAS	20
OTHER	0	OTHER	187	OTHER	0
TOTAL	243	TOTAL	2093	TOTAL	315

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	2960. *	5.	220350.	223315.
NITROGEN	**********	8510. *	175.	2399770.	2408455.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	226420.	LOSS	43.62
NITROGEN	2454865.	LOSS	470.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PIT RIVER	66.540	10328.9	0.076	0.900	15.	182.
CLARK CREEK	1.080	50.2	0.033	0.340	22.	231.
BURNEY CREEK	5.860	471.4	0.037	1.000	15.	392.
HAT CREEK	23.220	942.8	0.075	0.422	55.	323.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
CLAYTON CREEK	0.022	1.150

* FISH HATCHERIES.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LAKE CASITAS (EUTROPHIC)
COUNTY - VENTURA
STORET NO. - 0604 WORKING PAPER NO. 742. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	89.40	10.97	28.6	0.522	19.1

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
143.	520.	2.5	0.029	0.014	0.050	0.280

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/ 7/75) N	(6/24/75) N	(11/13/75) N
3.2	**********			

SUMMARY OF PHYTOPLANKTON DATA

3/ 7/75		6/24/75		11/13/75	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
CHROOMONAS	268	DINOBRYON	2973	CYCLOTELLA	1453
ANKISTRODESMUS	239	CHROOMONAS	125	MELOSIRA	305
SCENEDESMUS	89			CHROOMONAS	229
				CRYPTOMONAS	152
				ANKISTRODESMUS	152
OTHER	0	OTHER	0	OTHER	386
TOTAL	596	TOTAL	3098	TOTAL	2677

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	25.	395.	420.
NITROGEN	**********	**********	865.	23435.	24300.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	445.	LOSS	0.04
NITROGEN	14865.	39.	2.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
COYOTE CREEK	0.191	34.2	0.012	0.495	2.	87.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
SANTA ANA CREEK	0.014	1.222
HOBLES-CASITAS CANAL	0.020	0.530

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LAKE CROWLEY (EUTROPHIC)
COUNTY - MONO
STORET NO. - 0605 WORKING PAPER NO. 743. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	21.38	10.6	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
108.	239.	3.2	0.046	0.034	0.045	0.275

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
5.8	2.7	(6/10/75) N	(6/30/75) N	(11/ 5/75) N

SUMMARY OF PHYTOPLANKTON DATA

6/10/75 GENERA	COUNT	6/30/75 GENERA	COUNT	11/ 5/75 GENERA	COUNT
CHROOMONAS	1049	CHROOMONAS	892	APHANIZOMENON	421
ASTERIONELLA	504	ANABAENA	803	FRAGILARIA	225
DINOBRYON	378	ASTERIONELLA	758	CHROOMONAS	168
FRAGILARIA	252	SCHROEDERIA	580	OSCILLATORIA	140
CRYPTOMONAS	84	CRYPTOMONAS	312	STEPHANODISCUS	112
OTHER	0	OTHER	668	OTHER	29
TOTAL	2267	TOTAL	4013	TOTAL	1095

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - DON PEDRO RESERVOIR (MESOTROPHIC)
COUNTY - TUOLUMNE
STORET NO. - 0606 WORKING PAPER NO. 744. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	3957.90	52.45	47.7	46.868	1.7

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
19.	44.	3.0	0.013	0.004	0.060	0.250

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
3.6	**********	(3/11/75) N	(6/25/75) P	(11/12/75) P

SUMMARY OF PHYTOPLANKTON DATA

3/11/75		6/25/75		11/12/75	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
CHROOMONAS	1543	MELOSIRA	2260	CHROOMONAS	171
MELOSIRA	450	CHROOMONAS	231	MELOSIRA	114
CRYPTOMONAS	107	CENTRIC DIATOM	138	CRYPTOMONAS	38
		CERATIUM	92	FRAGILARIA	19
		ASTERIONELLA	92	PERIDINIUM	19
OTHER	0	OTHER	231	OTHER	0
TOTAL	2100	TOTAL	3044	TOTAL	361

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	10625.	**********	5.	44305.	54935.
NITROGEN	23565.	**********	195.	1312590.	1336350.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	26600.	52.	1.05
NITROGEN	1328520.	1.	25.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TUOLUMNE RIVER	27.750	2393.2	0.022	0.775	8.	283.
ROGER CREEK	0.028	10.7	0.056	1.822	5.	150.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
N. FK., TUOLUMNE RIVER	0.027	0.910
HATCH CREEK	0.026	1.601
MOCCASIN CREEK	0.040	0.957
SULLIVAN CREEK	0.061	1.189
WOODS CREEK *	0.704	2.797
TURNBACK CREEK *	0.441	1.798

* BELOW POINT SOURCE.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LAKE ELSINORE (HYPEREUTROPHIC)
COUNTY - RIVERSIDE
STORET NO. - 0607 WORKING PAPER NO. 745. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	••••••••••	10.52	••••••	••••••••••	••••••

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
940.	5545.	0.3	0.469	0.092	0.120	3.035

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
70.6	6.3 - 16.5 (3)	(3/10/75) N	(6/23/75) N	(11/13/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/10/75 GENERA	COUNT	6/23/75 GENERA	COUNT	11/13/75 GENERA	COUNT
CHLAMYDOMONAS	99798	CHLAMYDOMONAS	10045	CHLOROPHYTAN CELLS	79650
ANKISTRODESMUS	34004	ANABAENOPSIS	5281	CHLOROCOCCALAN CELL	25519
CYCLOTELLA	2213	ANKISTRODESMUS	2485	ANKISTRODESMUS	12663
CRYPTOMONAS	2213	CYCLOTELLA	414	NITZSCHIA	11406
CHLOROGONIUM	805	OSCILLATORIA	362	PENNATE DIATOMS	7733
OTHER	402	OTHER	674	OTHER	4544
TOTAL	139435	TOTAL	19261	TOTAL	141515

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	••••••••••	••••••••••	••••••••••	••••••••••	••••••••••
NITROGEN	••••••••••	••••••••••	••••••••••	••••••••••	••••••••••

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	••••••••••	•••••	••••••••••
NITROGEN	••••••••••	•••••	••••••••••

•••• LAKE SAMPLING ONLY ••••

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - FALLEN LEAF LAKE (OLIGOTROPHIC)
COUNTY - EL DORADO
STORET NO. - 0608 WORKING PAPER NO. 746. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	43.30	5.71	1.5	1.510	64.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
12.	14.	12.1	0.007	0.005	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/18/75) N	(6/27/75) N	(11/ 4/75) P AND N
0.8	**********			

SUMMARY OF PHYTOPLANKTON DATA

3/18/75 GENERA	COUNT	6/27/75 GENERA	COUNT	11/ 4/75 GENERA	COUNT
CRYPTOMONAS	205	SYNEDRA	20	CHROOMONAS	43
NITZSCHIA	160	CYCLOTELLA	10	DINOFLAGELLATES	21
DINOBRYON	160	DINOBRYON	10		
CYCLOTELLA	114				
CHLAMYDOMONAS	91				
OTHER	114	OTHER	0	OTHER	0
TOTAL	844	TOTAL	40	TOTAL	64

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	50.	585.	635.
NITROGEN	**********	**********	1810.	36445.	38255.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	510.	20.	0.11
NITROGEN	28475.	26.	6.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
GLEN ALPINE CREEK	1.037	28.0	0.011	0.699	13.	805.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LAKE HENNESSEY (EUTROPHIC)
COUNTY - NAPA
STORET NO. - 0609 WORKING PAPER NO. 747, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	134.70	3.52	10.5	1.353	1.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	*MEDIAN TOTAL N(MG/L)
131.	247.	2.1	0.027	0.012	0.060	0.350

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
4.5	5.4	(3/13/75) N	(6/26/75) N	(11/11/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/13/75 GENERA	COUNT	6/26/75 GENERA	COUNT	11/11/75 GENERA	COUNT
CHROOMONAS	2039	GLOEOCYSTIS	780	CLOSTERIUM	262
ASTERIONELLA	105	APHANIZOMENON	654	APHANIZOMENON	75
STEPHANODISCUS	35	CHROOMONAS	503	CRYPTOMONAS	37
SYNEDRA	18	MELOSIRA	151	CHROOMONAS	37
CRYPTOMONAS	18	COELASTRUM	101	ANKISTRODESMUS	37
OTHER	18	OTHER	328	OTHER	0
TOTAL	2233	TOTAL	2517	TOTAL	446

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	5155.	5155.
NITROGEN	**********	**********	**********	61695.	61695.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	7760.	LOSS	1.46
NITROGEN	39955.	35.	17.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CONN CREEK	0.483	33.4	0.232	1.325	106.	604.
CHILES CREEK	0.266	47.1	0.045	1.239	8.	221.
CLEAR CREEK	0.354	35.5	0.048	1.174	15.	369.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
UNNAMED CREEK #1	0.054	1.587
SAGE CREEK	0.082	1.803

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LAKE HENSHAW (EUTROPHIC)
COUNTY - SAN DIEGO
STORET NO. - 0610 WORKING PAPER NO. 748. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	533.50	24.36	6.1	0.964	5.7

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
170.	540.	1.0	0.138	0.073	0.070	0.620

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/ 7/75) N	(6/23/75) N	(11/13/75) N
26.8	7.6			

SUMMARY OF PHYTOPLANKTON DATA

3/ 7/75 GENERA	COUNT	6/23/75 GENERA	COUNT	11/13/75 GENERA	COUNT
MALLOMONAS	7701	ANACYSTIS(MICROCYSTIS)	987	OSCILLATORIA	681
CHROOMONAS	553	ANKISTRODESMUS	816	CHROOMONAS	367
ANKISTRODESMUS	277	GLENODINIUM	258	ANKISTRODESMUS	314
CRYPTOMONAS	184	CHROOMONAS	258	PEDIASTRUM	209
MELOSIRA	184	KIRCHNERIELLA	215	MELOSIRA	209
OTHER	323	OTHER	728	OTHER	577
TOTAL	9222	TOTAL	3262	TOTAL	2357

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	2115.	2115.
NITROGEN	**********	**********	**********	70365.	70365.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5510.	LOSS	0.09
NITROGEN	39460.	44.	2.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SAN LUIS REY RIVER	0.156	87.0	**********	**********	4.*	85.*
W. FK.. SAN LUIS REY R.	0.125	66.0	0.029	1.403	2.	84.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
CARISTA CREEK	0.057	1.572
UNNAMED STREAM E-1	0.020	0.860
UNNAMED STREAM F-1	0.047	1.559
SPARLING CREEK	0.065	1.232
UNNAMED STREAM H-1	0.071	1.507

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - IRON GATE RESERVOIR (EUTROPHIC)
COUNTY - SISKIYOU
STORET NO. - 0611 WORKING PAPER NO. 749. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	11838.90	3.39	21.4	74.483	11.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
71.	150.	1.5	0.184	0.124	0.690	1.520

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.2	26.7 - 33.2 (2)	(3/27/75) N	(7/16/75) N	(10/31/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/27/75 GENERA	COUNT	7/16/75 GENERA	COUNT	10/31/75 GENERA	COUNT
CRYPTOMONAS	1976	SCHROEDERIA	435	OSCILLATORIA	133
STEPHANODISCUS	1297	SYNEDRA	73	CRYPTOMONAS	80
CHROOMONAS	247	CRYPTOMONAS	73	APHANIZOMENON	53
PENNATE DIATOMS	62	MELOSIRA	73	STEPHANODISCUS	53
EUGLENA	62	APHANIZOMENON	36	CHROOMONAS	27
OTHER	60	OTHER	0	OTHER	0
TOTAL	3704	TOTAL	690	TOTAL	346

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	372800.	372800.
NITROGEN	**********	**********	**********	4085210.	4085210.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	345290.	7.	109.97
NITROGEN	4944425.	LOSS	1205.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
KLAMATH RIVER	70.400	11181.0	0.163	1.766	33.	356.
FALL CREEK	0.230	37.8	0.033	0.693	6.	133.
CAMP CREEK	0.283	43.3	0.059	0.970	12.	200.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
JENNY CREEK	0.036	0.686
SCOTHCH CREEK	0.036	1.117

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LOPEZ RESERVOIR (EUTROPHIC)
COUNTY - SAN LUIS OBISPO
STORET NO. - 0614 WORKING PAPER NO. 750. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	175.30	3.80	16.6	0.336	7.3

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
337.	493.	3.3	0.371	0.343	0.090	0.540

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/10/75) N	(6/25/75) N	(11/12/75) N
8.7	4.5 - 12.9 (2)			

SUMMARY OF PHYTOPLANKTON DATA

3/10/75 GENERA	COUNT	6/25/75 GENERA	COUNT	11/12/75 GENERA	COUNT
CERATIUM	534	CHROOMONAS	298	CHROOMONAS	191
FRAGILARIA	140	APHANIZOMENON	216	APHANIZOMENON	127
STEPHANODISCUS	56	SCHROEDERIA	162	CRYPTOMONAS	127
CRYPTOMONAS	56	FRAGILARIA	81	CERATIUM	64
EUGLENA	28	STEPHANODISCUS	54	OOCYSTIS	42
OTHER	0	OTHER	55	OTHER	21
TOTAL	814	TOTAL	866	TOTAL	572

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	4270.	4275.
NITROGEN	**********	**********	280.	11705.	11985.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2835.	34.	1.12
NITROGEN	7865.	34.	3.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ARROYO GRANDE CREEK	0.044	35.2	0.789	1.419	31.	56.
LOPEZ CREEK	0.146	55.9	0.197	0.464	16.	38.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LAKE MARY (OLIGOTROPHIC)
COUNTY - MONO
STORET NO. - 0615 WORKING PAPER NO. 751. NTIS ACCESSION NO. PB-282 633/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	0.42	8.2	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
21.	33.	5.2	0.010	0.002	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
2.6	**********	(6/30/75) P	(11/ 5/75) N

SUMMARY OF PHYTOPLANKTON DATA

6/30/75 GENERA	COUNT	11/ 5/75 GENERA	COUNT
SYNEDRA	568	ASTERIONELLA	215
ASTERIONELLA	487	DINOBRYON	132
CRYPTOMONAS	81	CRYPTOMONAS	83
DINOBRYON	41	CHROOMONAS	66
CHROOMONAS	41	SYNEDRA	17
OTHER	41	OTHER	0
TOTAL	1259	TOTAL	513

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LAKE MENDOCINO (MESO-EUTROPHIC)
COUNTY - MENDOCINO
STORET NO. - 0616 WORKING PAPER NO. 752. NTIS ACCESSION NO. PB-282 598/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	271.90	7.92	19.1	10.952	168.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
76.	104.	1.6	0.020	0.008	0.050	0.320

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/12/75) N	(6/26/75) N	(11/11/75) N
3.1	**********			

SUMMARY OF PHYTOPLANKTON DATA

3/12/75 GENERA	COUNT	6/26/75 GENERA	COUNT	11/11/75 GENERA	COUNT
MELOSIRA	313	CHROOMONAS	1188	CHROOMONAS	1101
CHROOMONAS	57	ANKISTRODESMUS	64	OSCILLATORIA	227
		CRYPTOMONAS	64	CRYPTOMONAS	194
				MELOSIRA	81
				STEPHANODISCUS	81
OTHER	0	OTHER	0	OTHER	115
TOTAL	370	TOTAL	1316	TOTAL	1799

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	31360.	31360.
NITROGEN	**********	**********	**********	393180.	393180.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	19285.	39.	3.96
NITROGEN	275870.	30.	49.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
EAST FORK RUSSIAN RIVER	10.480	238.8	0.079	0.984	118.	1457.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
COLD CREEK	0.082	0.931

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - NICASIO RESERVOIR (EUTROPHIC)
COUNTY - MARIN
STORET NO. - 0617

WORKING PAPER NO. 753. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	93.20	3.42	8.1	1.353	256.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
67.	140.	0.4	0.055	0.013	0.345	0.690

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/13/75) N	(6/26/75) P	(11/11/75) N
6.6	**********			

SUMMARY OF PHYTOPLANKTON DATA

3/13/75 GENERA	COUNT	6/26/75 GENERA	COUNT	11/11/75 GENERA	COUNT
CRYPTOMONAS	362	STEPHANODISCUS	3156	CRYPTOMONAS	297
CHROOMONAS	226	CHROOMONAS	298	PEDIASTRUM	231
STEPHANODISCUS	90	APHANIZOMENON	149	ASTERIONELLA	99
		CRUCIGENIA	124	MELOSIRA	66
		APHANOCAPSA	99	TRACHELOMONAS	33
OTHER	0	OTHER	250	OTHER	66
TOTAL	678	TOTAL	4076	TOTAL	792

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	2055.	2055.
NITROGEN	**********	**********	**********	70440.	70440.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
		LOSS	
PHOSPHORUS	2575.	3.	0.60
NITROGEN	68470.		20.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NICASIO CREEK	0.456	31.3	0.047	1.474	22.	677.
HALLECK CREEK	0.328	22.5	0.046	1.684	21.	774.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LOWER OTAY RESERVOIR (EUTROPHIC)
COUNTY - SAN DIEGO
STORET NO. - 0618 WORKING PAPER NO. 754. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	256.40	4.58	15.2	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
151.	875.	1.3	0.058	0.013	0.180	0.920

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
15.9	**********	(3/ 7/75) P	(6/20/75) N	(11/14/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

3/ 7/75 GENERA	COUNT	6/20/75 GENERA	COUNT	11/14/75 GENERA	COUNT
ASTERIONELLA	2170	APHANIZOMENON	370	OSCILLATORIA	6873
COELASTRUM	457	DACTYLOCOCCOPSIS	148	CHLAMYDOMONAS	1430
CRYPTOMONAS	381	DINORHYON	74	DACTYLOCOCCOPSIS	440
SCENEDESMUS	304	OSCILLATORIA	74	SCENEDESMUS	440
OOCYSTIS	266	ANABAENA	74	CRYPTOMONAS	385
OTHER	381	OTHER	75	OTHER	329
TOTAL	3959	TOTAL	815	TOTAL	9897

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LAKE PILLSBURY (EUTROPHIC)
COUNTY - LAKE
STORET NO. - 0619 WORKING PAPER NO. 755, NTIS ACCESSION NO. PB-282 646/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	748.50	8.10	14.3	16.067	87.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
60.	86.	0.8	0.022	0.008	0.060	0.230

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
6.4	0.6	(3/12/75) N (6/26/75) P AND N (11/11/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/12/75 GENERA	COUNT	6/26/75 GENERA	COUNT	11/11/75 GENERA	COUNT
SYNEDRA	10	ANABAENA	1861	MELOSIRA	331
EUGLENA	10	CRYPTOMONAS	64	CRYPTOMONAS	37
		TRACHELOMONAS	64	DACTYLOCOCCOPSIS	37
				CHROOMONAS	36
OTHER	0	OTHER	0	OTHER	0
TOTAL	20	TOTAL	1989	TOTAL	441

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	10.	26005.	26015.
NITROGEN	**********	**********	425.	455255.	455680.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	30910.	LOSS	3.21
NITROGEN	599395.	LOSS	56.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
EEL RIVER	7.530	362.6	0.051	0.720	36.	640.
MICE FORK	4.720	224.6	0.026	0.534	20.	349.
SQUAW VALLEY CREEK	0.215	9.1	0.052	0.845	119.	1769.
SMOKEHOUSE CREEK	0.775	32.9	0.061	0.653	53.	528.
SALMON CREEK	0.771	32.6	0.036	1.045	31.	965.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - SANTA MARGARITA LAKE (EUTROPHIC)
COUNTY - SAN LUIS OBISPO
STORET NO. - 0620 WORKING PAPER NO. 756. NTIS ACCESSION NO. PB-282 779/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	290.10	3.18	10.1	0.747	1.6

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
125.	291.	2.5	0.037	0.014	0.070	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
9.1	8.0	(3/10/75) N	(6/25/75) N	(11/12/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/10/75 GENERA	COUNT	6/25/75 GENERA	COUNT	11/12/75 GENERA	COUNT
ASTERIONELLA	4920	MOUGEOTIA	2181	DACTYLOCOCCOPSIS	304
CRYPTOMONAS	109	SYNEDRA	488	CERATIUM	152
		DINOBRYON	163	STEPHANODISCUS	122
		ANABAENOPSIS	130	DINOBRYON	91
		OSCILLATORIA	130	GLENODINIUM	61
OTHER	0	OTHER	98	OTHER	121
TOTAL	5029	TOTAL	3190	TOTAL	851

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	1535.	1540.
NITROGEN	**********	**********	210.	12880.	13090.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	935.	39.	0.48
NITROGEN	14135.	LOSS	4.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SALINAS RIVER	0.501	182.1	0.039	0.259	3.	22.
TORO CREEK	0.017	24.8	0.102	0.688	5.	16.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
ALAMO CREEK	0.102	0.688

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - SHASTA LAKE
COUNTY - SHASTA
STORET NO. - 0621

(MESOTROPHIC)

WORKING PAPER NO. 757. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	16630.40	119.40	46.5	295.380	217.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
57.	98.	3.0	0.021	0.015	0.060	0.240

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
4.1	**********	(3/26/75) N (7/14/75) N (11/ 3/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/26/75 GENERA	COUNT	7/14/75 GENERA	COUNT	11/ 3/75 GENERA	COUNT
STEPHANODISCUS	1475	CRYPTOMONAS	85	MELOSIRA	637
ASTERIONELLA	413	SYNEDRA	42	SYNEDRA	80
PERIDINIUM	59	STEPHANODISCUS	42	CHROOMONAS	80
CRYPTOMONAS	30	CHLOROPHYTAN COLONIES	42		
OTHER	0	OTHER	0	OTHER	0
TOTAL	1977	TOTAL	211	TOTAL	797

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	4760.	**********	**********	359855.	364615.
NITROGEN	12800.	**********	**********	11399335.	11412135.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	316715.	13.	3.05
NITROGEN	13283340.	LOSS	95.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SACRAMENTO RIVER	40.950	1100.7	0.033	1.584	34.	1847.
SALT CREEK C1	0.854	35.0	0.020	0.982	15.	756.
MCCLOUD RIVER	26.750	1585.1	0.021	0.815	11.	434.
SQUAW CREEK R1	6.310	158.0	0.014	0.587	18.	739.
PIT RIVER	172.120	12823.1	0.050	1.165	21.	493.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
NOSONI CREEK	0.018	1.365
SQUAW CREEK F1	0.019	0.876
SALT CREEK H1	0.022	1.153
POTEM CREEK	0.018	0.765

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - SHAVER LAKE (MESOTROPHIC)
COUNTY - FRESNO
STORET NO. - 0622 WORKING PAPER NO. 758. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	75.40	8.39	19.9	7.649	252.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
13.	18.	3.9	0.014	0.004	0.060	0.250

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
1.7	1.0	(6/ 4/75) P	(6/24/75) N	(11/13/75) N

SUMMARY OF PHYTOPLANKTON DATA

6/ 4/75 GENERA	COUNT	6/24/75 GENERA	COUNT	11/13/75 GENERA	COUNT
SYNEDRA	27	CHROOMONAS	193	CRYPTOMONAS	153
PERIDINIUM	20	MALLOMONAS	97	ANKISTRODESMUS	44
ASTERIONELLA	20	CRYPTOMONAS	32	ACHNANTHES	22
ANKISTRODESMUS	7	DINOBRYON	32		
		SYNEDRA	32		
OTHER	0	OTHER	0	OTHER	0
TOTAL	74	TOTAL	386	TOTAL	219

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	10.	870.	880.
NITROGEN	**********	**********	400.	37295.	37695.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3620.	LOSS	0.10
NITROGEN	66825.	LOSS	4.5

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
N. FK. STEVENSON CREEK	0.025	1.565
MARKWOOD CREEK	0.019	0.740

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - SILVER LAKE (OLIGOTROPHIC)
COUNTY - MONO
STORET NO. - 0623 WORKING PAPER NO. 759. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	0.45	10.5	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
23.	33.	3.7	0.012	0.003	0.055	0.225

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/10/75) N	(6/30/75) P	(11/ 5/75) P
1.8	**********			

SUMMARY OF PHYTOPLANKTON DATA

6/10/75 GENERA	COUNT	6/30/75 GENERA	COUNT	11/ 5/75 GENERA	COUNT
CHROOMONAS	343	CHROOMONAS	228	CHROOMONAS	57
DINOBRYON	115	DINOBRYON	114	CRYPTOMONAS	45
ASTERIONELLA	38	SYNEDRA	114	DINOBRYON	11
CRYPTOMONAS	38	ASTERIONELLA	76		
SYNEDRA	38				
OTHER	0	OTHER	0	OTHER	0
TOTAL	572	TOTAL	532	TOTAL	113

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - TULLOCK RESERVOIR (EUTROPHIC)
COUNTY - CALAVERAS, TUOLUMNE
STORET NO. - 0624 WORKING PAPER NO. 760, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2533.30	5.10	16.5	51.590	19.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
33.	65.	1.7	0.025	0.009	0.060	0.280

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
13.9	**********	(3/14/75) N	(6/25/75) N	(11/12/75) P

SUMMARY OF PHYTOPLANKTON DATA

3/14/75 GENERA	COUNT	6/25/75 GENERA	COUNT	11/12/75 GENERA	COUNT
ACHNANTHES	3864	ASTERIONELLA	432	OSCILLATORIA	225
ASTERIONELLA	2006	STEPHANODISCUS	118	GLENODINIUM	112
SYNEDRA	1783	FRAGILARIA	79	ASTERIONELLA	37
STEPHANODISCUS	743	OSCILLATORIA	79	CRYPTOMONAS	37
CRYPTOMONAS	297	DINOBRYON	79	STEPHANODISCUS	37
OTHER	744	OTHER	195	OTHER	113
TOTAL	9437	TOTAL	982	TOTAL	561

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	10.	37410.	37420.
NITROGEN	**********	**********	425.	1528520.	1528945.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	32540.	13.	7.34
NITROGEN	1506550.	1.	299.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
STANISLAUS RIVER	49.840	2343.9	0.022	0.916	15.	614.
BLACK CREEK	0.242	49.5	0.022	1.473	3.	227.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
GREEN SPRING RUN	0.054	1.515

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - LOWER TWIN LAKE (MESOTROPHIC)
COUNTY - MONO
STORET NO. - 0626 WORKING PAPER NO. 761. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	101.30	1.52	15.2	1.699	157.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
26.	25.	6.4	0.014	0.003.	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
2.9	**********	(3/19/75) N	(7/ 1/75) P	(11/ 6/75) P

SUMMARY OF PHYTOPLANKTON DATA

3/19/75 GENERA	COUNT	7/ 1/75 GENERA	COUNT	11/ 6/75 GENERA	COUNT
CHROOMONAS	275	MELOSIRA	81	FRAGILARIA	72
MELOSIRA	78	CRYPTOMONAS	33	CRYPTOMONAS	72
SYNEDRA	78	STEPHANODISCUS	16	CHROOMONAS	72
STEPHANODISCUS	39	SYNEDRA	16	TABELLARIA	36
ASTERIONELLA	39	FRAGILARIA	16		
OTHER	40	OTHER	0	OTHER	0
TOTAL	549	TOTAL	162	TOTAL	252

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	10.	825.	835.
NITROGEN	**********	**********	360.	48840.	49200.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	695.	17.	0.55
NITROGEN	51060.	LOSS	32.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ROBINSON CREEK	1.303	76.4	0.015	0.730	8.	474.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
UNNAMED CREEK B1	0.018	1.142

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN CALIFORNIA

NAME - UPPER TWIN LAKE (MESOTROPHIC)
COUNTY - MONO
STORET NO. - 0625 WORKING PAPER NO. 762. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	76.40	1.07	14.3	1.303	136.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
25.	32.	5.1	0.015	0.004	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/10/75) N	(7/ 1/75) P	(11/ 6/75) N
3.3	**********			

SUMMARY OF PHYTOPLANKTON DATA

6/10/75 GENERA	COUNT	7/ 1/75 GENERA	COUNT	11/ 6/75 GENERA	COUNT
MELOSIRA	122	SYNEDRA	265	MELOSIRA	231
STEPHANODISCUS	61	ASTERIONELLA	166	CRYPTOMONAS	115
TABELLARIA	61	STEPHANODISCUS	33	DINOBRYON	38
ANABAENA	31	MELOSIRA	33		
		CHROOMONAS	33		
OTHER	0	OTHER	0	OTHER	0
TOTAL	275	TOTAL	530	TOTAL	384

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	5.	**********	5.	885.	895.
NITROGEN	235.	**********	130.	32675.	33040.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	615.	31.	0.84
NITROGEN	36200.	LOSS	30.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ROBINSON CREEK	0.889	54.4	0.021	0.767	11.	395.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - BARKER RESERVOIR (MESOTROPHIC)
COUNTY - BOULDER
STORET NO. - 0801 WORKING PAPER NO. 765. NTIS ACCESSION NO. PB-271 470/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	99.20	1.70	8.3	1.608	104.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
18.	29.	2.1	0.023	0.006	0.045	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
5.3	**********	(5/ 7/75) P AND N (8/26/75) N (10/10/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 7/75 GENERA	COUNT	8/26/75 GENERA	COUNT	10/10/75 GENERA	COUNT
MELOSIRA	9734	FRAGILARIA	1381	CHLAMYDOMONAS	6478
CHROOMONAS	721	SPONDYLOSIUM	563	MELOSIRA	748
FRAGILARIA	613	CHROOMONAS	256	CHROOMONAS	208
CRYPTOMONAS	216	MELOSIRA	104	OSCILLATORIA	125
MALLOMONAS	72	ANABAENA	51	CRYPTOMONAS	42
OTHER	108	OTHER	203	OTHER	81
TOTAL	11464	TOTAL	2558	TOTAL	7682

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	455.	**********	**********	550.	1005.
NITROGEN	1640.	**********	**********	29880.	31520.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	860.	14.	0.59
NITROGEN	26340.	16.	18.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MIDDLE BOULDER CREEK	1.550	93.8	0.016	0.623	5.	288.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - BARR LAKE (EUTROPHIC)
COUNTY - ADAMS
STORET NO. - 0802 WORKING PAPER NO. 766. NTIS ACCESSION NO. PB-278 507/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	7.57	5.2	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
162.	591.	1.2	0.930	0.730	1.090	2.960

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
28.8	42.8 - 186.3 (2)	(5/ 5/75) N	(8/26/75) N	(10/10/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 5/75 GENERA	COUNT	8/26/75 GENERA	COUNT	10/10/75 GENERA	COUNT
CHROOMONAS	1148	APHANIZOMENON	3265	APHANIZOMENON	1012
CRYPTOMONAS	836	GOMPHOSPHAERIA	96	MELOSIRA	156
SCHROEDERIA	313	ANACYSTIS(MICROCYSTIS)	96	ANACYSTIS(MICROCYSTIS)	78
CYSTS	52	PHORMIDIUM	48	NITZSCHIA	78
				CHROOMONAS	78
OTHER	0	OTHER	0	OTHER	0
TOTAL	2349	TOTAL	3505	TOTAL	1402

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
SPEER CANAL	1.664	6.565
O'BRIAN CANAL	1.960	7.701
DENVER-HUDSON CANAL	2.441	6.851
UNNAMED DITCH (C1)	0.270	1.855
UNNAMED STREAM (D1)	1.611	5.861

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - BLUE MESA RESERVOIR (MESOTROPHIC)
COUNTY - GUNNISON
STORET NO. - 0803 WORKING PAPER NO. 767. NTIS ACCESSION NO. PB-271 658/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	8873.30	36.62	31.1	47.647	325.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
91.	149.	2.6	0.019	0.005	0.040	0.320

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
		(8/26/75) N	(9/29/75) N
6.8	**********		

SUMMARY OF PHYTOPLANKTON DATA

8/26/75 GENERA	COUNT	9/29/75 GENERA	COUNT
APHANIZOMENON	1324	APHANIZOMENON	4391
CHROOMONAS	461	CHROOMONAS	187
CRYPTOMONAS	230	FRAGILARIA	93
FRAGILARIA	115	CRYPTOMONAS	93
ANACYSTIS(MICROCYSTIS)	115	SCHROEDERIA	47
OTHER	231	OTHER	0
TOTAL	2476	TOTAL	4811

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	3160.	**********	10.	94390.	97560.
NITROGEN	11655.	**********	355.	1187820.	1199830.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	30730.	69.	2.66
NITROGEN	817720.	32.	32.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
GUNNISON RIVER	24.780	5524.5	0.071	1.115	9.	143.
LAKE FORK GUNNISON RIVER	7.430	955.7	0.068	0.723	15.	172.
CEBOLLA CREEK	3.130	955.7	0.075	0.488	8.	49.
WILLOW CREEK	0.007	186.5	0.223	1.493	43.	380.
SOAP CREEK	1.950	181.3	0.064	0.379	24.	144.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
CEBOLLA CREEK (C2)	0.115	0.907
STEUBEN CREEK	0.067	0.893
EAST ELK CREEK	0.187	0.736
RED CREEK	0.130	1.005

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - CHERRY CREEK LAKE (EUTROPHIC)
COUNTY - ARAPAHOE
STORET NO. - 0804 WORKING PAPER NO. 768. NTIS ACCESSION NO. PB-271 473/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	997.10	3.24	5.2	0.208	3.6

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
177.	422.	0.8	0.054	0.007	0.040	0.770

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
23.3	3.2	(5/ 7/75) N	(8/22/75) N	(10/ 9/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 7/75 GENERA	COUNT	8/22/75 GENERA	COUNT	10/ 9/75 GENERA	COUNT
CHROOMONAS	841	FRAGILARIA	920	TRACHELOMONAS	373
CRYPTOMONAS	342	DIATOMA	920	CRYPTOMONAS	248
STEPHANODISCUS	156	NAVICULA	307	ANKISTRODESMUS	124
NAVICULA	31	STEPHANODISCUS	184	STEPHANODISCUS	41
ANKISTRODESMUS	31	CRYPTOMONAS	184	MELOSIRA	41
OTHER	280	OTHER	367	OTHER	84
TOTAL	1681	TOTAL	2882	TOTAL	911

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	4940.	4945.
NITROGEN	**********	**********	245.	26095.	26340.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	745.	85.	1.53
NITROGEN	6870.	74.	8.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CHERRY CREEK	0.196	932.4	0.788	3.615	5.	24.
COTTONWOOD CREEK	0.008	20.1	0.044	0.656	0.5	8.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - DILLON RESERVOIR (OLIGOTROPHIC)
COUNTY - SUMMIT
STORET NO. - 0806

WORKING PAPER NO. 769. NTIS ACCESSION NO. PB-278 484/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	867.60	12.76	24.6	9.610	1.3

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
42.	86.	8.1	0.009	0.002	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME (8/25/75)	(10/ 9/75)
3.2	**********	P	P

SUMMARY OF PHYTOPLANKTON DATA

8/25/75 GENERA	COUNT	10/ 9/75 GENERA	COUNT
FLAGELLATES	1537	FRAGILARIA	3297
CRYPTOMONAS	713	ASTERIONELLA	1486
ASTERIONELLA	604	FLAGELLATES	650
FRAGILARIA	384	CRYPTOMONAS	279
DINOBRYON	384	CYSTS	232
OTHER	0	OTHER	93
TOTAL	3622	TOTAL	6037

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2365.	**********	10.	5395.	7770.
NITROGEN	15635.	**********	315.	191310.	207260.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2225.	71.	0.61
NITROGEN	174050.	16.	16.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BLUE RIVER	2.440	313.4	0.012	0.444	1.	85.
TENMILE CREEK	2.630	240.4	0.022	0.850	10.	302.
MINERS CREEK	0.270	17.3	0.011	0.527	5.	266.
SNAKE RIVER	2.080	201.0	0.011	0.385	3.	121.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
MEADOW CREEK	0.021	0.714

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - GRAND LAKE (MESOTROPHIC)
COUNTY - GRAND *** INCLUDES TRIBS AND LOADS FOR SHADOW MTN LAKE (0813)
STORET NO. - 0807 WORKING PAPER NO. 770. NTIS ACCESSION NO. PB-272 233/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	479.10	2.05	41.3	13.465	92.0 *

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
19.	19.	3.4	0.013	0.003	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
4.9	0.2 - 0.4 (2)	(8/26/75) P	(10/10/75) P

SUMMARY OF PHYTOPLANKTON DATA

8/26/75 GENERA	COUNT	10/10/75 GENERA	COUNT
ASTERIONELLA	523	SPONDYLOSIUM	339
ANABAENA	262	CRYPTOMONAS	136
CRYPTOMONAS	131	MELOSIRA	136
MELOSIRA	87	ASTERIONELLA	102
		ANABAENA	34
OTHER	0	OTHER	33
TOTAL	1003	TOTAL	780

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	920.	**********	45.	9455.	10420.
NITROGEN	3695.	**********	1715.	397275.	402685.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5980.	43.	1.38*
NITROGEN	199480.	50.	53.5*

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NORTH INLET	1.990	118.9	0.020	0.673	11.	355.
ECHO CREEK	1.441	70.4	0.011	0.461	7.	298.
COLORADO RIVER	2.500	264.2	0.030	1.056	9.	315.
GRANBY PUMP CANAL	7.310	**********	0.022	1.039	**********	**********

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
LITTLE COLUMBINE CREEK	0.032	0.370
ONAHU CREEK	0.022	0.657
UNNAMED CREEK	0.019	0.451

* COMBINED GRAND-SHADOW MOUNTAIN LAKES.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - SHADOW MOUNTAIN LAKE (MESOTROPHIC)
COUNTY - GRAND *** SEE GRAND LAKE (0807) FOR LOADING VALUES
STORET NO. - 0813 WORKING PAPER NO. 770. NTIS ACCESSION NO. PB-272 233/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	471.60	5.48	3.8	13.465	92.0 *

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
27.	33.	1.8	0.020	0.003	0.040	0.300

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
5.7	**********	(8/26/75) P AND N (10/10/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

8/26/75 GENERA	COUNT	10/10/75 GENERA	COUNT
APHANIZOMENON	630	MELOSIRA	706
PHORMIDIUM	533	ASTERIONELLA	246
ANACYSTIS(MICROCYSTIS)	388	CRYPTOMONAS	246
CHROOMONAS	291	CHROOMONAS	184
NITZSCHIA	242	PENNATE DIATOMS	184
OTHER	486	OTHER	214
TOTAL	2570	TOTAL	1780

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

* COMBINED GRAND-SHADOW MOUNTAIN LAKES.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - GREEN MOUNTAIN RESERVOIR (OLIGOTROPHIC)
COUNTY - SUMMIT
STORET NO. - 0808 WORKING PAPER NO. 771. NTIS ACCESSION NO. PB-272 235/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1551.40	8.60	22.2	13.460	164.8

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
54.	107.	2.8	0.010	0.002	0.040	0.230

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
5.8	0.1	(8/25/75) P	(10/ 9/75) P

SUMMARY OF PHYTOPLANKTON DATA

8/25/75 GENERA	COUNT	10/ 9/75 GENERA	COUNT
FRAGILARIA	3470	CYCLOTELLA	635
CYCLOTELLA	132	FRAGILARIA	212
ASTERIONELLA	132	CRYPTOMONAS	60
CRYPTOMONAS	88		
OTHER	0	OTHER	0
TOTAL	3822	TOTAL	907

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	895.	**********	10.	5680.	6585.
NITROGEN	22350.	**********	355.	152755.	175460.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	6390.	3.	0.77
NITROGEN	168530.	4.	20.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BLUE RIVER	9.640	1323.5	0.016	0.435	3.	78.
BLACK CREEK	0.862	47.9	0.014	0.364	8.	223.
OTTER CREEK	0.131	21.8	0.075	0.481	16.	94.
CATARACT CREEK	0.537	36.3	0.011	0.317	6.	154.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - HOLBROOK RESERVOIR (EUTROPHIC)
COUNTY - OTERO
STORET NO. - 0809 WORKING PAPER NO. 772. NTIS ACCESSION NO. PB-271 554/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	2.72	2.5	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
85.	1812.	0.3	0.329	0.028	0.070	3.020

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 6/75) N	(8/22/75) P	(10/ 7/75) N
111.9	63.3			

SUMMARY OF PHYTOPLANKTON DATA

5/ 6/75 GENERA	COUNT	8/22/75 GENERA	COUNT	10/ 7/75 GENERA	COUNT
OSCILLATORIA	36005	ANABAENOPSIS	34071	ANABAENOPSIS	31245
SYNEDRA	16440	OSCILLATORIA	11005	OSCILLATORIA	13077
FLAGELLATES	6083	ANABAENA	2111	NITZSCHIA	7487
STEPHANODISCUS	2137	CRYPTOMONAS	2111	CRYPTOMONAS	2595
CRYPTOMONAS	1973	SCENEDESMUS	1508	STEPHANODISCUS	799
OTHER	4185	OTHER	1808	OTHER	1099
TOTAL	66823	TOTAL	52614	TOTAL	56302

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
OUTLET DITCH (A1)	0.210	1.955
DITCH (A2)	0.440	3.630

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - LAKE MEREDITH (EUTROPHIC)
COUNTY - CROWLEY
STORET NO. - 0810 WORKING PAPER NO. 773. NTIS ACCESSION NO. PB-271 478/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	13.03	2.5	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
100.	7055.	0.3	0.397	0.098	0.110	4.630

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
164.7	40.2	(5/ 6/75) N	(8/22/75) N	(10/ 7/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 6/75 GENERA	COUNT	8/22/75 GENERA	COUNT	10/ 7/75 GENERA	COUNT
OSCILLATORIA	14778	MERISMOPEDIA	85437	OSCILLATORIA	932405
CYLINDROCYSTIS	6584	OSCILLATORIA	63972	ANABAENOPSIS	13091
FLAGELLATES	3438	ANABAENA	11477	COELOSPHAERIUM	2036
APHANOCAPSA	1756	ANABAENOPSIS	3400	CYLINDROCYSTIS	1455
EUGLENA	1171	ANACYSTIS(MICROCYSTIS)	1913	APHANOTHECE	1164
OTHER	4609	OTHER	7013	OTHER	3782
TOTAL	32336	TOTAL	173212	TOTAL	953933

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
LAKE MEREDITH OUTLET	0.120	5.405
LAKE MEREDITH INLET	0.071	4.174
UNNAMED DITCH (B1)	0.220	3.267
UNNAMED DITCH (C1)	0.153	3.717
UNNAMED DITCH (D1)	0.070	7.827
BOB CREEK	0.053	4.912

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - MILTON RESERVOIR (EUTROPHIC)
COUNTY - WELD
STORET NO. - 0811 WORKING PAPER NO. 774. NTIS ACCESSION NO. PB-271 469/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	8.41	7.3	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
324.	1078.	1.8	0.846	0.808	2.280	3.530

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 6/75) N	(8/26/75) N	(10/10/75) N
5.9	7.2			

SUMMARY OF PHYTOPLANKTON DATA

5/ 6/75 GENERA	COUNT	8/26/75 GENERA	COUNT	10/10/75 GENERA	COUNT
PEDIASTRUM	102	MELOSIRA	590	CHROOMONAS	272
CRYPTOMONAS	102	FRAGILARIA	553	NITZSCHIA	136
CHROOMONAS	102	CHROOMONAS	406	CYCLOTELLA	91
SCHROEDERIA	51	ASTERIONELLA	369	PENNATE DIATOMS	91
SCENEDESMUS	51	ANABAENA	332	APHANIZOMENON	45
OTHER	0	OTHER	257	OTHER	89
TOTAL	408	TOTAL	2507	TOTAL	724

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
GILMORE DITCH	0.980	3.286
HEEBE CANAL	0.501	3.730
PLATTE VALLEY CANAL	1.357	6.067

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN COLORADO

NAME - NAVAJO RESERVOIR (MESO-EUTROPHIC)
COUNTY - ARCHULETA, CO; SAN JUAN, RIO ARRIBA, NM
STORET NO. - 0812 WORKING PAPER NO. 775, NTIS ACCESSION NO. PB-278 545/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	8443.40	63.25	33.3	49.460	1.4

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
71.	166.	0.5	0.036	0.013	0.050	0.365

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
2.2	**********	(4/30/75) P AND N (8/18/75) P AND N (9/30/75) N

SUMMARY OF PHYTOPLANKTON DATA

8/18/75 GENERA	COUNT	9/30/75 GENERA	COUNT
CRYPTOMONAS	253	CHROOMONAS	605
APHANIZOMENON	63	CRYPTOMONAS	287
OTHER	0	OTHER	0
TOTAL	316	TOTAL	892

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2510.	**********	10.	155570.	158090.
NITROGEN	7205.	**********	360.	1769425.	1776990.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	27970.	82.	2.50
NITROGEN	1403140.	21.	28.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SAN JUAN RIVER	17.440	3185.7	0.102	1.137	17.	203.
PIEDRA RIVER	14.720	1629.1	0.076	0.972	35.	294.
SAMBRITO CREEK	0.064	46.6	0.121	1.488	6.	65.
UNNAMED STREAM (D1)	0.010	20.7	0.159	1.579	18.	273.
LOS PINOS RIVER	5.620	1320.9	0.070	0.973	7.	127.
UNNAMED STREAM (F1)	0.052	18.6	0.140	1.333	31.	115.
UNNAMED STREAM (H1)	0.040	17.4	0.015	0.831	1.	70.
SPRING CREEK	0.336	150.2	0.324	1.880	14.	116.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - AMERICAN FALLS RESERVOIR (EUTROPHIC)
COUNTY - BANNOCK, BINGHAM, POWER
STORET NO. - 1601 WORKING PAPER NO. 776. NTIS ACCESSION NO. PB-272 237/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	35224.00	277.03	9.2	182.140	109.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
150.	324.	0.9	0.105	0.035	0.080	0.575

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
15.4	0.2 - 16.0 (2)	(5/15/75) P AND N (8/ 5/75) N (9/18/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/15/75 GENERA	COUNT	8/ 5/75 GENERA	COUNT	9/18/75 GENERA	COUNT
CYCLOTELLA	4856	APHANIZOMENON	3684	APHANIZOMENON	745
ASTERIONELLA	2147	FRAGILARIA	1505	CHROOMONAS	348
CHROOMONAS	1227	MELOSIRA	415	CRYPTOMONAS	248
DIATOMA	562	NAVICULA	208	FRAGILARIA	149
NITZSCHIA	460	CYMBELLA	156	CYCLOTELLA	99
OTHER	1279	OTHER	207	OTHER	100
TOTAL	10531	TOTAL	6175	TOTAL	1689

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	58095.	108130.	**********	443790.	610015.
NITROGEN	271125.	442190.	55.	7465330.	8178700.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	577365.	5.	2.20
NITROGEN	12267495.	LOSS	29.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SNAKE RIVER	144.900	29292.9	0.075	1.184	11.	185.
UNNAMED STREAM	1.210	271.9	0.364	2.312	19.	134.
DANIELSON CREEK	1.700	253.3	0.042	1.660	9.	356.
PORTNEUF RIVER	15.800	3367.0	0.503	3.115	26.	252.
BANNOCK CREEK	1.090	1020.5	0.381	1.816	13.	61.
SPRING CREEK	13.580	69.9	0.042	1.333	130.	8172.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
UNNAMED STREAM C1	0.209	1.715

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - CASCADE RESERVOIR (EUTROPHIC)
COUNTY - VALLEY
STORET NO. - 1602 WORKING PAPER NO. 777. NTIS ACCESSION NO. PB-272 231/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1621.30	107.24	8.1	27.260	339.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
18.	32.	2.2	0.032	0.009	0.060	0.320

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		6/ 4/75	8/ 1/75	9/16/75
8.1	0.6 - 1.2 (3)	(6/ 4/75) N	(8/ 1/75) N	(9/16/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

6/ 4/75 GENERA	COUNT	8/ 1/75 GENERA	COUNT	9/16/75 GENERA	COUNT
ASTERIONELLA	5069	FRAGILARIA	1206	APHANIZOMENON	979
DINOBRYON	870	APHANIZOMENON	827	CRYPTOMONAS	367
SYNEDRA	605	MELOSIRA	276	FRAGILARIA	245
CENTRIC DIATOM	151	CHROOMONAS	138	CHROOMONAS	82
MELOSIRA	151	APHANOTHECE	103	MELOSIRA	82
OTHER	417	OTHER	277	OTHER	40
TOTAL	7263	TOTAL	2827	TOTAL	1795

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1520.	**********	**********	39025.	40545.
NITROGEN	4600.	**********	90.	516985.	521675.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	25985.	36.	0.38
NITROGEN	829205.	LOSS	4.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NORTH FORK PAYETTE RIVER	10.190	440.3	0.033	0.527	20.	389.
GOLD FORK RIVER	5.910	388.5	0.057	0.437	26.	216.
BOULDER CREEK	0.950	99.7	0.076	0.597	22.	205.
LAKE FORK CREEK	3.350	198.4	0.022	0.363	31.	210.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
ROCK CREEK	0.034	0.486
MUD CREEK	0.052	0.939

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - COEUR D'ALENE LAKE (MESOTROPHIC)
COUNTY - BENEWAH, KOOTENAI
STORET NO. - 1603 WORKING PAPER NO. 778. NTIS ACCESSION NO. PB-278 518/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	9945.60	129.50	2.3	179.380	19.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
23.	43.	3.0	0.017	0.005	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
10.4	**********	(4/ 4/75) P AND N (7/22/75) N (9/ 9/75) P

SUMMARY OF PHYTOPLANKTON DATA

4/ 4/75 GENERA	COUNT	7/22/75 GENERA	COUNT	9/ 9/75 GENERA	COUNT
MELOSIRA	9594	MELOSIRA	592	APHANIZOMENON	471
ASTERIONELLA	296	APHANIZOMENON	85	TABELLARIA	471
SYNEDRA	42	FRAGILARIA	42	CRYPTOMONAS	118
FRAGILARIA	42	ANABAENA	389	MELOSIRA	47
CRYPTOMONAS	272	CHROOMONAS	272	SYNEDRA	47
OTHER	233	OTHER	233	OTHER	95
TOTAL	10651	TOTAL	1516	TOTAL	1249

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	13580.	**********	250.	165985.	179815.
NITROGEN	44875.	**********	9325.	3342530.	3396730.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	109525.	39.	1.39
NITROGEN	4354550.	LOSS	26.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WOLF LODGE CREEK	1.480	153.1	0.018	0.580	5.	162.
COEUR D'ALENE RIVER	72.370	3833.2	0.049	0.638	26.	389.
ST. JOE RIVER	96.110	4480.7	0.020	0.447	13.	331.
BENEWAH CREEK	0.710	137.0	0.048	0.569	7.	106.
PLUMMER CREEK	0.310	112.4	0.054	1.180	4.	109.
LAKE CREEK	0.660	68.6	0.052	1.842	14.	534.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
FERNAN LAKE OUTLET	0.042	0.743
ROCKFORD CREEK	0.053	1.180
MICA CREEK	0.034	0.471

MURPHY CREEK	0.170	7.690
ROSE CREEK M1	0.192	3.307
ROSE CREEK N1	0.241	3.151
SOUTH FORK ROCK CREEK	0.173	3.384
COUGAR CREEK	0.070	0.941
COTTONWOOD CREEK	0.492	4.316
SQUAW CREEK	0.060	1.036

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - DWORSHAK RESERVOIR (OLIGOTROPHIC)
COUNTY - CLEARWATER
STORET NO. - 1604 WORKING PAPER NO. 779. NTIS ACCESSION NO. PB-272 257/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	6319.60	76.89	55.5	196.780	305.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
18.	18.	2.5	0.010	0.009	0.080	0.260

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
2.4	0.2 - 0.9 (4)	(4/ 7/75) P AND N (7/23/75) N (9/11/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

4/ 7/75 GENERA	COUNT	7/23/75 GENERA	COUNT	9/11/75 GENERA	COUNT
MELOSIRA	1036	MALLOMONAS	286	COELOSPHAERIUM	579
CHROOMONAS	192	OOCYSTIS	239	MELOSIRA	241
CRYPTOMONAS	154	ANKISTRODESMUS	95	APHANIZOMENON	96
		MELOSIRA	48	ANKISTRODESMUS	48
				ASTERIONELLA	48
OTHER	0	OTHER	0	OTHER	97
TOTAL	1382	TOTAL	668	TOTAL	1109

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	570.	**********	**********	114745.	115315.
NITROGEN	1700.	**********	**********	3246250.	3247950.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	84025.	27.	1.50
NITROGEN	1892860.	42.	42.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
N FORK CLEARWATER RIVER	106.920	3522.4	0.019	0.590	17.	534.
ELK CREEK	7.300	240.4	0.031	0.234	27.	231.
REEDS CREEK	4.900	161.6	0.036	0.303	33.	262.
BREAKFAST CREEK	11.000	334.1	0.017	0.417	17.	569.
LITTLE N FK CLEARWATER R	23.000	678.6	0.018	0.421	18.	462.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
CRANBERRY CREEK	0.031	0.643
SWAMP CREEK	0.029	0.532
WEITAS CREEK	0.033	0.393
ISABELLA CREEK	0.013	0.516

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - HAUSER LAKE (EUTROPHIC)
COUNTY - KOOTENAI
STORET NO. - 1605 WORKING PAPER NO. 780. NTIS ACCESSION NO. PB-272 256/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	2.43	1.2	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
24.	42.	3.4	0.028	0.013	0.075	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME			
11.1	0.6 - 11.6 (3)	(6/ 3/75) N	(7/23/75) N	(9/10/75) N	(10/23/75) N

SUMMARY OF PHYTOPLANKTON DATA

6/ 3/75 GENERA	COUNT	7/23/75 GENERA	COUNT	9/10/75 GENERA	COUNT	10/23/75 GENERA	COUNT
CRYPTOMONAS	459	CHROOMONAS	260	APHANIZOMENON	2225	CRYPTOMONAS	217
ANKISTRODESMUS	153	TABELLARIA	186	MELOSIRA	805	CHROOMONAS	186
UNKNOWN CELLS	92	ASTERIONELLA	74	EUGLENA	284	MELOSIRA	186
NITZSCHIA	61	CRYPTOMONAS	74	CHLAMYDOMONAS	189	SCHROEDERIA	186
		DINOBRYON	74	TABELLARIA	189	MALLOMONAS	62
OTHER	0	OTHER	112	OTHER	568	OTHER	29
TOTAL	765	TOTAL	780	TOTAL	4260	TOTAL	866

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - HAYDEN LAKE (OLIGO-MESOTROPHIC)
COUNTY - KOOTENAI
STORET NO. - 1606 WORKING PAPER NO. 781. NTIS ACCESSION NO. PB-272 232/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	161.40	17.00	7.3	2.000	2.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
30.	32.	6.5	0.010	0.003	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
2.8	0.2 - 1.5 (2)	(4/ 4/75) P	(7/23/75) N	(9/10/75) P

SUMMARY OF PHYTOPLANKTON DATA

4/ 4/75 GENERA	COUNT	7/23/75 GENERA	COUNT	9/10/75 GENERA	COUNT
DINOBRYON	510	DINOBRYON	333	STEPHANODISCUS	80
MELOSIRA	198	CYCLOTELLA	212	CHROOMONAS	32
ASTERIONELLA	170	ANABAENA	30	APHANOTHECE	16
ANKISTRODESMUS	113	ANKISTRODESMUS	30		
CYCLOTELLA	113				
OTHER	58	OTHER	0	OTHER	0
TOTAL	1162	TOTAL	605	TOTAL	128

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	180.	1315.	1495.
NITROGEN	**********	**********	6785.	55215.	62000.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	0.09
NITROGEN	**********	*****	3.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
HAYDEN CREEK	0.910	73.8	0.016	0.479	6.	190.
HOKINS CREEK	0.250	20.2	0.030	0.811	11.	436.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
YELLOWBANKS CREEK	0.018	2.100

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - ISLAND PARK RESERVOIR (EUTROPHIC)
COUNTY - FREMONT
STORET NO. - 1607 WORKING PAPER NO. 782. NTIS ACCESSION NO. PB-278 522/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1245.80	31.54	5.0	13.560	109.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
71.	120.	2.8	0.034	0.012	0.050	0.320

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
9.3	3.6 - 6.6 (3)	(7/30/75) N	(9/ 3/75) N	(10/20/75) N

SUMMARY OF PHYTOPLANKTON DATA

7/30/75 GENERA	COUNT	9/ 3/75 GENERA	COUNT	10/20/75 GENERA	COUNT
APHANIZOMENON	454	APHANIZOMENON	3254	FRAGILARIA	596
CHROOMONAS	165	CHROOMONAS	38	APHANIZOMENON	553
CRYPTOMONAS	83	MELOSIRA	38	MELOSIRA	213
CYANOPHYTON FILAMENTS	83			CHRYSOPHYTAN CELLS	170
ANACYSTIS(MICROCYSTIS)	83			CRYPTOMONAS	85
OTHER	82	OTHER	0	OTHER	0
TOTAL	950	TOTAL	3330	TOTAL	1617

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	30.	9975.	10005.
NITROGEN	**********	**********	1065.	142730.	143795.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	22550.	LOSS	0.32
NITROGEN	459510.	LOSS	4.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
HENRYS FORK	9.140	676.0	0.022	0.585	9.	78.
HOTEL CREEK	0.520	38.3	0.041	0.589	18.	233.
SHEEP CREEK	0.080	32.4	0.056	0.781	4.	61.
ICEHOUSE CREEK	0.560	19.7	0.037	0.651	22.	423.
SHERIDAN CREEK	0.850	282.3	0.061	0.668	3.	60.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - LAKE LOWELL
COUNTY - CANYON
STORET NO. - 1608

(EUTROPHIC)

WORKING PAPER NO. 783. NTIS ACCESSION NO. PB-278 528/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	**********	39.80	5.9	10.160	262.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
90.	199.	0.6	0.070	0.015	0.070	0.690

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
25.4	0.4 - 1.0 (2)	(4/ 8/75) N	(8/ 1/75) N	(9/16/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

4/ 8/75 GENERA	COUNT	8/ 1/75 GENERA	COUNT	9/16/75 GENERA	COUNT
FRAGILARIA	9120	APHANIZOMENON	5622	MELOSIRA	5126
ASTERIONELLA	5267	MELOSIRA	861	APHANIZOMENON	267
MELOSIRA	636	FRAGILARIA	208	ANKISTRODESMUS	160
STEPHANODISCUS	600	STEPHANODISCUS	124	COSMARIUM	107
SYNEDRA	141	CHROOMONAS	84	OOCYSTIS	107
OTHER	390	OTHER	306	OTHER	107
TOTAL	16154	TOTAL	7205	TOTAL	5874

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	10.	32090.	32100.
NITROGEN	**********	**********	340.	282160.	282500.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	18199.	43.	0.81
NITROGEN	384500.	LOSS	7.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNGAGED CANAL C)	0.420	**********	0.100	1.812	**********	**********
NEW TURN CANAL	9.760	**********	0.072	0.761	**********	**********

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
UNGAGED CANAL E)	0.043	1.006

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - MAGIC RESERVOIR (EUTROPHIC)
COUNTY - CAMAS, BLAINE
STORET NO. - 1609 WORKING PAPER NO. 785. NTIS ACCESSION NO. PB-278 553/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	4144.00	15.80	15.0	15.420	175.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
94.	166.	2.5	0.062	0.020	0.130	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
7.3	1.3 - 8.3 (2)	(5/15/75) P AND N (8/ 5/75) N (9/17/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/15/75 GENERA	COUNT	8/ 5/75 GENERA	COUNT	9/17/75 GENERA	COUNT
STEPHANODISCUS	4099	CHROOMONAS	132	APHANIZOMENON	3297
CHROOMONAS	592	CRYPTOMONAS	75	CERATIUM	230
CRYPTOMONAS	42	FRAGILARIA	75	CHROOMONAS	153
		ASTERIONELLA	56	MELOSIRA	153
		ANABAENA	38	CRYPTOMONAS	38
OTHER	0	OTHER	56	OTHER	0
TOTAL	4733	TOTAL	432	TOTAL	3871

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	8770.	**********	5.	31975.	40750.
NITROGEN	32255.	**********	110.	376630.	408995.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	16845.	59.	2.58
NITROGEN	359260.	12.	25.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BIG WOOD RIVER	9.290	2147.1	0.046	0.684	4.	83.
CAMAS CREEK	5.290	1678.3	0.077	1.384	11.	83.
POISON CREEK	0.040	18.7	0.092	0.830	49.	597.
ROCK CREEK	0.320	105.7	0.097	1.160	11.	118.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
LAVA CREEK	0.053	0.577
CAMP CREEK	0.071	0.688

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - PALISADES RESERVOIR (MESOTROPHIC)
COUNTY - BONNEVILLE, ID: LINCOLN, WY
STORET NO. - 1610 WORKING PAPER NO. 786. NTIS ACCESSION NO. PB-272 236/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	13571.60	61.31	28.2	181.050	108.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
112.	225.	3.9	0.024	0.007	0.080	0.270

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
2.1	0.3 - 1.8 (3)	(8/ 5/75) N (9/18/75) P AND N (10/20/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

8/ 5/75 GENERA	COUNT	9/18/75 GENERA	COUNT	10/20/75 GENERA	COUNT
CHROOMONAS	339	APHANIZOMENON	237	APHANIZOMENON	638
ASTERIONELLA	242	CHROOMONAS	142	CHROOMONAS	478
CRYPTOMONAS	97	ASTERIONELLA	47	CRYPTOMONAS	478
CERATIUM	48			MELOSIRA	319
CHLAMYDOMONAS	48			ASTERIONELLA	53
OTHER	98	OTHER	0	OTHER	53
TOTAL	872	TOTAL	426	TOTAL	2019

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	165.	**********	10.	383070.	383245.
NITROGEN	4895.	**********	460.	3585375.	3590730.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	126270.	67.	6.25
NITROGEN	2920000.	19.	58.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SNAKE RIVER	128.990	8984.7	0.041	0.594	29.	261.
BEAR CREEK	2.210	199.7	0.036	0.356	19.	122.
BIG ELK CREEK	1.960	153.3	0.027	0.426	11.	172.
INDIAN CREEK	0.390	100.5	0.037	0.494	10.	131.
MCCOY CREEK	2.310	279.7	0.017	0.289	4.	77.
SALT RIVER	21.420	2198.9	0.091	1.423	23.	375.
GREYS RIVER	18.470	1160.3	0.116	0.343	49.	179.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
LITTLE ELK CREEK	0.020	0.259

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - PAYETTE LAKE (MESOTROPHIC)
COUNTY - VALLEY
STORET NO. - 1611 WORKING PAPER NO. 784. NTIS ACCESSION NO. PB-277 931/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	373.00	21.60	5.7	10.580	140.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
12.	18.	6.8	0.013	0.007	0.060	0.240

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
4.6	0.2 - 0.2 (2)	(6/ 4/75) P AND N (8/ 1/75) N (9/16/75) P

SUMMARY OF PHYTOPLANKTON DATA

6/ 4/75 GENERA	COUNT	8/ 1/75 GENERA	COUNT	9/16/75 GENERA	COUNT
ASTERIONELLA	1170	ASTERIONELLA	1505	TABELLARIA	629
MELOSIRA	1080	MELOSIRA	1254	MELOSIRA	449
SYNEDRA	225	TABELLARIA	502	ASTERIONELLA	180
CHROOMONAS	90	CHROOMONAS	351	CRUCIGENIA	45
CRYPTOMONAS	45	SYNEDRA	151		
OTHER	0	OTHER	150	OTHER	0
TOTAL	2610	TOTAL	3913	TOTAL	1303

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	15.	4080.	4095.
NITROGEN	**********	**********	535.	197510.	198045.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	4030.	2.	0.19
NITROGEN	118875.	40.	9.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NORTH FORK PAYETTE RIVER	7.580	255.9	0.013	0.413	11.	508.
HORSE CREEK	0.290	12.8	0.012	0.578	8.	430.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
ELIP CREEK	0.012	0.282
FALL CREEK	0.015	0.504

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - LOWER TWIN LAKES (EUTROPHIC)
COUNTY - KOOTENAI
STORET NO. - 1612 WORKING PAPER NO. 787, NTIS ACCESSION NO. PB-278 554/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	133.40	16.35	2.3	2.140	1.8

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
15.	22.	3.3	0.016	0.009	0.050	0.320

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
2.3	0.4 - 0.9 (3)	(6/ 3/75) N (7/23/75) N (9/10/75) P AND N (10/24/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

6/ 3/75 GENERA	COUNT	7/23/75 GENERA	COUNT	9/10/75 GENERA	COUNT	10/24/75 GENERA	COUNT
DINOBRYON	1214	MELOSIRA	875	MERISMOPEDIA	3081	ANKISTRODESMUS	128
ASTERIONELLA	187	FRAGILARIA	175	CHROOMONAS	171	CRYPTOMONAS	128
FLAGELLATES	140	ANKISTRODESMUS	131	MELOSIRA	171	CHROOMONAS	43
ANABAENA	47	ASTERIONELLA	87	CRYPTOMONAS	128	TABELLARIA	43
NITZSCHIA	47	CHLOROPHYTAN CELLS	87	OOCYSTIS	86		
OTHER	45	OTHER	176	OTHER	129	OTHER	0
TOTAL	1680	TOTAL	1531	TOTAL	3766	TOTAL	342

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	120.	1790.	1910.
NITROGEN	**********	**********	4465.	47180.	51645.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	235.	88.	0.12
NITROGEN	7610.	85.	3.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SHOVE CREEK	0.110	6.6	0.023	0.642	8.	298.
FISH CREEK	0.610	37.8	0.030	0.558	15.	227.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
UNNAMED STREAM B1	0.037	0.570

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN IDAHO

NAME - UPPER TWIN LAKES (EUTROPHIC)
COUNTY - KOOTENAI
STORET NO. - 1613 WORKING PAPER NO. 787. NTIS ACCESSION NO. PB-278 554/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	133.40	16.35	2.3	2.140	1.8

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
14.	20.	3.3	0.017	0.004	0.045	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME			
		(6/ 3/75)	(7/23/75)	(9/10/75)	(10/24/75)
5.0	0.3 - 2.1 (3)	N	N	P	P AND N

SUMMARY OF PHYTOPLANKTON DATA

6/ 3/75 GENERA	COUNT	7/23/75 GENERA	COUNT	9/10/75 GENERA	COUNT	10/24/75 GENERA	COUNT
DINOBRYON	788	CRYPTOMONAS	291	MELOSIRA	932	FLAGELLATES	1200
CHROOMONAS	338	CHROOMONAS	97	FRAGILARIA	883	CRYPTOMONAS	768
ANKISTRODESMUS	113	STICHOCOCCUS	97	EPITHEMIA	343	CHROOMONAS	432
ASTERIONELLA	113	CHROOCOCCUS	48	LYNGBYA	294	CHLAMYDOMONAS	144
CRYPTOMONAS	113	COELOSPHAERIUM	48	ANKISTRODESMUS	196	MALLOMONAS	144
OTHER	167	OTHER	0	OTHER	1769	OTHER	47
TOTAL	1632	TOTAL	581	TOTAL	4417	TOTAL	2735

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	120.	1790.	1910.
NITROGEN	**********	**********	4465.	47180.	51645.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	235.	88.	0.12
NITROGEN	7610.	85.	3.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SHOVE CREEK	0.110	6.6	0.023	0.642	8.	298.
FISH CREEK	0.610	37.8	0.030	0.558	15.	227.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME - CANYON FERRY RESERVOIR (EUTROPHIC
COUNTY - BROADWATER, LEWIS & CLARK
STORET NO. - 3001 WORKING PAPER NO. 790. NTIS ACCESSION NO. PB-270 605/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	41191.30	142.45	17.4	155.493	186.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
127.	235.	1.4	0.047	0.029	0.170	0.440

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
5.8	5.2 - 7.4 (3)	(5/28/75) N (7/31/75) N (9/ 4/75) P AND N (10/22/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/28/75 GENERA	COUNT	7/31/75 GENERA	COUNT	9/ 4/75 GENERA	COUNT	10/22/75 GENERA	COUNT
CHROOMONAS	411	FRAGILARIA	2667	FRAGILARIA	389	APHANIZOMENON	265
MELOSIRA	376	APHANIZOMENON	1731	MELOSIRA	389	CHROOMONAS	144
FRAGILARIA	274	NITZSCHIA	187	CHROOMONAS	311	MELOSIRA	120
DIATOMA	205	CHROOMONAS	187	ASTERIONELLA	78	NAVICULA	96
CYMBELLA	137	SYNEDRA	140	STEPHANODISCUS	39	CYMBELLA	48
OTHER	753	OTHER	94	OTHER	116	OTHER	145
TOTAL	2156	TOTAL	5006	TOTAL	1322	TOTAL	818

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1305.	**********	105.	327900.	329310.
NITROGEN	4485.	**********	3900.	4178515.	4186900.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	183030.	44.	2.31
NITROGEN	3857500.	8.	29.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MISSOURI RIVER	150.450	39738.4	0.078	0.870	8.	100.
MAGPIE CREEK	0.105	63.4	0.026	0.427	1.	22.
BEAVER CREEK	0.222	148.7	0.077	0.540	4.	28.
CONFEDERATE CREEK	0.440	149.2	0.030	0.710	2.	66.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
AVALANCHE CREEK	0.086	0.650
WHITE CREEK	0.050	0.330
MANLEY DITCH	0.240	0.715

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME - CLARK CANYON RESERVOIR (EUTROPHIC)
COUNTY - BEAVERHEAD
STORET NO. - 3002 WORKING PAPER NO. 791, NTIS ACCESSION NO. PB-269 846/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	6011.40	19.97	15.8	10.180	1.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
264.	385.	2.6	0.049	0.027	0.160	0.550

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME			
		(5/28/75) N	(7/31/75) N	(9/ 3/75) N	(10/20/75) N
2.4	**********				

SUMMARY OF PHYTOPLANKTON DATA

5/28/75 GENERA	COUNT	7/31/75 GENERA	COUNT	9/ 3/75 GENERA	COUNT	10/20/75 GENERA	COUNT
CHROOMONAS	175	SCHROEDERIA	371	APHANIZOMENON	1634	APHANIZOMENON	327
CRYPTOMONAS	145	ANABAENA	53	CHROOMONAS	218	CHROOMONAS	210
EUNOTIA	87	CHROOMONAS	53	CRYPTOMONAS	145	CRYPTOMONAS	117
SCHROEDERIA	58			SCHROEDERIA	36	SCHROEDERIA	23
HANTZSCHIA	58						
OTHER	0	OTHER	0	OTHER	0	OTHER	0
TOTAL	523	TOTAL	477	TOTAL	2033	TOTAL	677

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	19935.	19940.
NITROGEN	**********	**********	140.	404850.	404990.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	11775.	41.	1.00
NITROGEN	311590.	23.	20.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
RED ROCK RIVER	6.650	4006.7	0.041	1.065	2.	56.
HORSE PRAIRIE CREEK	3.080	1320.9	0.075	1.150	6.	85.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME - FLATHEAD LAKE (OLIGOTROPHIC)
COUNTY - FLATHEAD, LAKE
STORET NO. - 3003 WORKING PAPER NO. 792, NTIS ACCESSION NO. PB-271 466/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	18854.20	475.60	13.5	331.730	225.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
89.	121.	5.9	0.008	0.004	0.050	0.230

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
1.3	**********	(5/29/75) N (7/25/75) P AND N (9/ 8/75) P

SUMMARY OF PHYTOPLANKTON DATA

5/29/75 GENERA	COUNT	7/25/75 GENERA	COUNT	9/ 8/75 GENERA	COUNT
ASTERIONELLA	67	DINOBRYON	300	CENTRIC DIATOM	37
TABELLARIA	38	CENTRIC DIATOM	128	CHROOMONAS	37
DINOBRYON	29	TABELLARIA	43	NITZSCHIA	37
CRYPTOMONAS	10	ASTERIONELLA	43		
CHROOMONAS	10	OOCYSTIS	43		
OTHER	0	OTHER	0	OTHER	0
TOTAL	154	TOTAL	557	TOTAL	111

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	26290.	**********	465.	146700.	173455.
NITROGEN	73820.	**********	17540.	6342010.	6433370.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	114370.	34.	0.36
NITROGEN	5510465.	14.	13.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
FLATHEAD RIVER	298.370	16058.0	0.015	0.582	7.	337.
DAYTON CREEK	0.112	179.0	0.031	0.788	0.6	16.
PROCTOR CREEK	0.007	12.1	0.021	0.876	0.4	16.
STONER CREEK	0.338	58.5	0.022	0.638	4.	116.
SWAN RIVER	32.880	1888.1	0.017	0.374	9.	205.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
BOHANNON CREEK	0.013	0.399
FORREY CREEK	0.018	0.689
TEEPEE CREEK	0.019	0.394
HELLROARING CREEK	0.014	0.377

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME - GEORGETOWN LAKE (EUTROPHIC)
COUNTY - DEER LODGE, GRANITE
STORET NO. - 3004 WORKING PAPER NO. 793. NTIS ACCESSION NO. PB-270 600/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	137.30	11.20	3.4	1.297	342.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
101.	162.	3.4	0.022	0.011	0.040	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
7.0	3.6	(7/29/75) N (9/ 4/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

7/29/75 GENERA	COUNT	9/ 4/75 GENERA	COUNT
FRAGILARIA	732	CHROOMONAS	641
OOCYSTIS	628	FRAGILARIA	529
CRYPTOMONAS	384	OSCILLATORIA	84
FLAGELLATES	384	ANABAENA	56
TETRAEDRON	314	ANACYSTIS(MICROCYSTIS)	56
OTHER	174	OTHER	110
TOTAL	2616	TOTAL	1476

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	55.	725.	780.
NITROGEN	**********	**********	2125.	33970.	36095.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1230.	LOSS	0.07
NITROGEN	37545.	LOSS	3.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NORTH FORK FLINT CREEK	0.144	37.3	0.021	0.863	3.	105.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
BLODGETT GULCH	0.097	0.823

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME - HEBGEN LAKE (MESO-EUTROPHIC)
COUNTY - GALLATIN
STORET NO. - 3005 WORKING PAPER NO. 794. NTIS ACCESSION NO. PB-270 604/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2408.70	51.27	8.2	28.853	172.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
76.	179.	3.4	0.022	0.020	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
4.1	1.7	(7/30/75) N	(9/ 3/75) N	(10/20/75) N

SUMMARY OF PHYTOPLANKTON DATA

7/30/75 GENERA	COUNT	9/ 3/75 GENERA	COUNT	10/20/75 GENERA	COUNT
CHROOMONAS	171	FRAGILARIA	316	MELOSIRA	428
FRAGILARIA	128	CHROOMONAS	281	ANACYSTIS(MICROCYSTIS)	86
APHANIZOMENON	86	ASTERIONELLA	105	SCHROEDERIA	86
ANABAENA	86	CRYPTOMONAS	70	CHROOMONAS	86
APHANOTHECE	86	STEPHANODISCUS	35	GOMPHOSPHAERIA	43
OTHER	42	OTHER	105	OTHER	169
TOTAL	599	TOTAL	912	TOTAL	898

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	55.	24120.	24175.
NITROGEN	**********	**********	1985.	661015.	663000.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	20550.	15.	0.47
NITROGEN	691505.	LOSS	12.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MADISON RIVER	13.940	1157.7	0.023	0.774	13.	211.
WATKINS CREEK	0.098	29.5	0.009	0.338	1.	35.
SOUTH FORK MADISON RIVER	3.920	211.6	0.020	0.761	12.	445.
DUCK CREEK	1.350	305.4	0.033	0.948	5.	132.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
DENNY CREEK	0.016	0.750
COUGAR CREEK	0.029	0.556

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME - KOOCANUSA RESERVOIR (MESOTROPHIC)
COUNTY - LINCOLN, MT: BRITISH COLUMBIA, CAN.
STORET NO. - 3006 WORKING PAPER NO. 795. NTIS ACCESSION NO. PB-270 633/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	23271.10	188.18	38.4	308.610	271.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
96.	173.	4.1	0.045	0.044	0.100	0.300

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
2.7	4.4 - 7.1 (2)	(6/ 2/75) N	(7/24/75) N	(9/ 5/75) N

SUMMARY OF PHYTOPLANKTON DATA

6/ 2/75 GENERA	COUNT	7/24/75 GENERA	COUNT	9/ 5/75 GENERA	COUNT
CHROOMONAS	339	ASTERIONELLA	355	CHROOMONAS	124
PANDORINA	135	CHROOMONAS	148	ANABAENA	62
CRYPTOMONAS	135	CRYPTOMONAS	89	APHANIZOMENON	31
CENTRIC DIATOM	135			ASTERIONELLA	31
NITZSCHIA	68				
OTHER	35	OTHER	0	OTHER	0
TOTAL	847	TOTAL	592	TOTAL	248

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1835.	**********	**********	24755.	26590.
NITROGEN	9120.	**********	**********	406850.	415970.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	228840.	LOSS	1.22*
NITROGEN	3725205.	LOSS	19.8*

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BRISTOW CREEK	0.440	66.8	0.017	0.439	3.	76.
BIG CREEK	4.310	361.8	0.015	0.279	7.	81.
TOBACCO RIVER	6.520	1139.6	0.040	0.743	11.	116.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
PINKHAM CREEK	0.024	0.659
CRIPPLE HORSE CREEK	0.017	0.567
CANYON CREEK	0.031	0.734
JACKSON CREEK	0.018	0.336
BARRON CREEK	0.015	0.378
WARLAND CREEK	0.037	0.657

MCGUIRE CREEK	0.014	0.312

* ESTIMATE BASED ON OUTLET LOADS.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME - MARY RONAN LAKE (MESO-EUTROPHIC)
COUNTY - LAKE
STORET NO. - 3007 WORKING PAPER NO. 796. NTIS ACCESSION NO. PB-270 635/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	76.80	6.15	8.5	0.110	17.4

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
68.	103.	3.3	0.020	0.006	0.040	0.520

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
4.7	**********	(6/ 2/75) N (7/28/75) N (9/ 5/75) N (10/22/75) N

SUMMARY OF PHYTOPLANKTON DATA

6/ 2/75 GENERA	COUNT	7/28/75 GENERA	COUNT	9/ 5/75 GENERA	COUNT	10/22/75 GENERA	COUNT
DINOBRYON	2787	APHANIZOMENON	245	CHROOMONAS	373	APHANIZOMENON	851
CRYPTOMONAS	190	CRUCIGENIA	163	APHANOTHECE	217	CRYPTOMONAS	675
ANACYSTIS(MICROCYSTIS)	127	CRYPTOMONAS	163	ANABAENA	155	ANACYSTIS(MICROCYSTIS)	294
APHANIZOMENON	95	CHROOMONAS	163	CRYPTOMONAS	155	CHROOMONAS	264
FRAGILARIA	95	ANABAENA	82	APHANIZOMENON	93	FRAGILARIA	175
OTHER	126	OTHER	124	OTHER	32	OTHER	441
TOTAL	3420	TOTAL	940	TOTAL	1025	TOTAL	2700

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	15.	1105.	1120.
NITROGEN	**********	**********	535.	16840.	17375.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	490.	56.	0.18
NITROGEN	8520.	51.	2.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
FREELAND CREEK	0.060	31.8	0.042	0.377	11.	84.
DONALDSON CREEK	0.046	5.7	0.025	0.502	54.	835.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME - LAKE MCDONALD (OLIGOTROPHIC)
COUNTY - FLATHEAD
STORET NO. - 3008 WORKING PAPER NO. 797. NTIS ACCESSION NO. PB-270 634/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	443.90	32.63	45.7	14.957	3.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
54.	6.	7.9	0.006	0.002	0.180	0.370

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
0.5	0.5	(6/ 1/75) P	(7/28/75) P

SUMMARY OF PHYTOPLANKTON DATA

6/ 1/75 GENERA	COUNT	7/28/75 GENERA	COUNT
DINOBRYON	56	CYCLOTELLA	57
GYMNODINIUM	14		
OTHER	0	OTHER	0
TOTAL	70	TOTAL	57

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL L ADING G/YR)
PHOSPHORUS	135.	**********	70.	9295.	44590.
NITROGEN	400.	**********	2635.	437040.	075.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5035.	47.	0.29
NITROGEN	364395.	17.	13.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TC AL N EXPORT /SQ KM/YR)
MCDONALD CREEK	12.650	283.9	0.014	0.769	26.	1223.
FISH CREEK	0.700	39.6	0.015	0.806	11.	473.
SNYDER CREEK	0.472	13.8	0.029	0.736	21.	814.
SPRAGUE CREEK	0.185	16.5	0.013	0.691	4.	241.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
JACKSON CREEK	0.070	0.727
FERN CREEK	0.014	0.067

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME = NELSON RESERVOIR (EUTROPHIC)
COUNTY = PHILLIPS
STUDY NO. = 3009 WORKING PAPER NO. 798. NTIS ACCESSION NO. PB-270 603/AS

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	18.45	5.7	2.290	1.8

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

REGION	MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
EPA.	58.		1.1	0.029	0.007	0.075	0.555

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
7.2	**********	(5/30/75) N (7/24/75) P AND N (9/ 8/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/30/75 GENERA	COUNT	7/24/75 GENERA	COUNT	9/ 8/75 GENERA	COUNT
CHROOMONAS	347	CHROOMONAS	523	APHANIZOMENON	3800
CRYPTOMONAS	241	APHANIZOMENON	486	FLAGELLATES	192
CRYPTOMONAS	87	ANKISTRODESMUS	75	CHROOMONAS	171
ANKISTRODESMUS	43			OSCILLATORIA	128
NITZSCHIA	43			SCHMOEDERIA	107
OTHER	0	OTHER	0	OTHER	43
TOTAL	781	TOTAL	1084	TOTAL	4441

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	15.	7620.	7635.
NITROGEN	**********	**********	535.	154895.	155430.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1360.	82.	0.41
NITROGEN	81345.	48.	8.4

C. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NELSON CANAL	2.290	**********	0.101	1.869	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

= SEELEY LAKE (MESO-EUTROPHIC)
= MISSOULA
= 3019 WORKING PAPER NO. 799. NTIS ACCESSION NO. PB-270 636/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	378.40	3.49	18.3	5.881	127.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
4.0.	60.	3.5	0.015	0.010	0.040	0.225

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
2.2	**********	(5/28/75) N	(7/29/75) N	(9/ 4/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

5/28/75			7/29/75		9/ 4/75	
GENUS	COUNT	GENERA	COUNT	GENERA	COUNT	
DIATOMS	824	CHROOMONAS	341	DINOBRYON	425	
GREENS	425	FRAGILARIA	289	FRAGILARIA	297	
BLUE-GREENS	142	MELOSIRA	210	CRYPTOMONAS	170	
CRYPTOMONADS	142	DINOBRYON	185	FLAGELLATES	170	
FLAGELLATES	142	ASTERIONELLA	26	ANABAENA	85	
FRAGILARIA	71	OTHER	53	OTHER	382	
OTHER	93					
TOTAL	1669	TOTAL	1024	TOTAL	1529	

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	40.	3340.	3380.
NITROGEN	**********	**********	1490.	74575.	76065.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2185.	38.	0.97
NITROGEN	115975.	LOSS	21.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CLEARWATER RIVER	4.898	273.2	0.016	0.356	8.	178.
DEER CREEK	0.763	51.3	0.018	0.504	14.	255.
SEELEY CREEK	0.111	13.2	0.015	0.427	4.	138.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
MILL CREEK	0.013	0.528
MARCS CREEK	0.027	0.673

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME = SAWN LAKE (MESOTROPHIC)
COUNTY = LAKE
STORET NO. = 3011 WORKING PAPER NO. 800, NTIS ACCESSION NO. PB-270 602/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	1737.90	10.85	21.9	34.338	85.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
85.	124.	5.5	0.010	0.004	0.050	0.230

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
3.3	**********	(6/ 2/75) N	(7/28/75) P	(9/ 5/75) P

SUMMARY OF PHYTOPLANKTON DATA

6/ 2/75		7/28/75		9/ 5/75	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
[illegible]	545	ASTERIONELLA	290	CHROOMONAS	238
[illegible]	95	CHROOMONAS	290	CHYPTOMONAS	119
CHYPTOMONAS	47			ASTERIONELLA	119
ASTERIONELLA	47			CYCLOTELLA	40
[illegible]	47				
OTHER	72	OTHER	0	OTHER	0
TOTAL	853	TOTAL	580	TOTAL	516

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	55.	16910.	16965.
NITROGEN	**********	**********	1990.	768200.	770190.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	9885.	42.	1.56
NITROGEN	494805.	LOSS	71.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SAWN RIVER	32.310	1416.7	0.013	0.606	10.	450.
JOHNSON CREEK	0.183	31.3	0.012	0.572	2.	104.
HOND CREEK	0.477	19.6	0.012	0.582	9.	491.
HALL CREEK	0.358	12.1	0.012	0.592	9.	555.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
SCHROLE CREEK	0.015	0.780
SHOOM CREEK	0.017	0.795

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

[redacted] = TULLY LAKE (OLIGOTROPHIC--MESOTROPHIC)
[redacted] = FLATHEAD
[redacted] = 2012 WORKING PAPER NO. 881. NTIS ACCESSION NO. PB-269 843/AB

I. [redacted]

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	527.10	5.37	58.9	4.250	2.8

II. [redacted]

MEDIAN [redacted] (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
9.	180.	4.1	0.011	0.004	0.050	0.240

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/ 2/75) N	(7/28/75) P	(9/ 5/75) P
2.1	**********			

SUMMARY OF PHYTOPLANKTON DATA

6/ 2/75		7/28/75		9/ 5/75	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
[redacted]	322	CHROOMONAS	106	FRAGILARIA	1107
[redacted]	298	OSCILLATORIA	35	DINOBRYON	420
FLAGELLATES	258			CHROOMONAS	191
[redacted]	226			CENTRIC DIATOM	153
[redacted]	193			CRYPTOMONAS	38
OTHER	129	OTHER	0	OTHER	38
TOTAL	1426	TOTAL	141	TOTAL	1947

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
[redacted]	**********	**********	**********	2730.	2730.
[redacted]	**********	**********	80.	184530.	184610.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
[redacted]	2035.	25.	0.51
[redacted]	178990.	8.	34.4

V. [redacted]

[redacted]	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
[redacted]	3.420	437.2	0.018	1.215	5.	343.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME = TIBER RESERVOIR (MESO-EUTROPHIC)
COUNTY = LIBERTY, TOOLE
STORET NO. = 3013 WORKING PAPER NO. 802. NTIS ACCESSION NO. PB-270 601/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	12760.90	50.59	15.3	28.170	318.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
135.	402.	1.3	0.018	0.004	0.180	0.430

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
2.0	0.3 - 0.3 (2)	(5/30/75) P AND N (7/25/75) P (9/ 9/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

5/30/75 GENERA	COUNT	7/25/75 GENERA	COUNT	9/ 9/75 GENERA	COUNT
CHROOMONAS	417	NITZSCHIA	1390	SYNEDRA	214
ANKISTRODESMUS	179	FRAGILARIA	348	CHROOMONAS	143
SYNEDRA	89	CHROOMONAS	139	OSCILLATORIA	107
CRYPTOMONAS	30	SCHROEDERIA	139		
TRACHELOMONAS	30	CRYPTOMONAS	70		
OTHER	0	OTHER	69	OTHER	0
TOTAL	745	TOTAL	2155	TOTAL	464

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	4390.	**********	**********	27735.	32125.
NITROGEN	18755.	**********	70.	1730285.	1749110.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	13855.	57.	0.64
NITROGEN	740563.	58.	34.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PARIAS PIATA	27.190	9665.9	0.017	1.427	2.	167.
WILLOW CREEK	5.343	2177.2	0.140	1.874	2.	21.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME = TONGUE RIVER RESERVOIR (EUTROPHIC)
COUNTY = [illegible]
STORET NO. = [illegible]

WORKING PAPER NO. 803. NTIS ACCESSION NO. PB-270 646/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	4584.30	14.15	6.1	14.150	78.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
194.	541.	0.7	0.051	0.008	0.050	0.620

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
19.8	**********	(5/23/75) N (8/29/75) N (10/15/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

5/23/75 GENERA	COUNT	8/29/75 GENERA	COUNT	10/15/75 GENERA	COUNT
CHROOMONAS	2447	EUGLENA	946	STEPHANODISCUS	670
EUGLENA	1106	GLENODINIUM	908	CRYPTOMONAS	591
CRYPTOMONAS	806	CHROOMONAS	870	FRAGILARIA	552
STEPHANODISCUS	737	STIPITOCOCCUS	416	CHROOMONAS	197
ASTERIONELLA	168	ASTERIONELLA	378	NAVICULA	118
OTHER	269	OTHER	794	OTHER	354
TOTAL	5531	TOTAL	4312	TOTAL	2482

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	14775.	**********	**********	118755.	133530.
NITROGEN	50200.	**********	**********	610205.	660405.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	16490.	88.	9.44
NITROGEN	610305.	6.	46.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TONGUE RIVER	14.150	3825.4	0.192	1.184	26.	132.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
DEER CREEK	0.063	1.399
SQUIRREL CREEK	0.127	1.719
FOURUS CREEK	0.099	1.430

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MONTANA

NAME = WHITEFISH LAKE (OLIGOTROPHIC)
COUNTY = FLATHEAD
STORET NO. = 3014 WORKING PAPER NO. 894, NTIS ACCESSION NO. PB-270 637/AH

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	325.90	13.56	32.9	5.570	2.5

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
87.	176.	5.3	0.008	0.003	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (MG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
1.4	**********	(6/ 2/75) N	(7/28/75) P	(9/ 5/75) P

SUMMARY OF PHYTOPLANKTON DATA

6/ 2/75 GENERA	COUNT	7/28/75 GENERA	COUNT	9/ 5/75 GENERA	COUNT
FRAGILARIA	259	FRAGILARIA	526	DINOBRYON	314
SYNEDRA	216	DINOBRYON	489	SPHAEROCYSTIS	140
STEPHANODISCUS	86	ASTERIONELLA	105	SCHROEDERIA	35
ASTERIONELLA	86	CRYPTOMONAS	70		
CHROMONAS	86	SCENEDESMUS	70		
OTHER	2	OTHER	174	OTHER	0
TOTAL	736	TOTAL	1432	TOTAL	489

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	55.	5800.	5855.
NITROGEN	**********	**********	2145.	157215.	159360.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2584.	56.	0.43
NITROGEN	87714.	45.	11.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LAZY CREEK	0.788	43.5	0.017	0.716	9.	379.
SWIFT CREEK	3.492	190.1	0.027	0.816	21.	483.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
BEAVER CREEK	0.012	0.643
BELL MOWING CREEK	0.014	0.554

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEVADA

NAME = LAHONTAN RESERVOIR (EUTROPHIC)
COUNTY = CHURCHILL, LYON
STORET NO. = 3202 WORKING PAPER NO. 807, NTIS ACCESSION NO. PB-281 900/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	9375.00	19.69	6.7	16.960	91.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
95.	141.	0.7	0.198	0.148	0.350	******

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
9.8	8.4 - 10.6 (2)	(3/17/75) N	(7/ 9/75) N	(11/ 7/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/17/75 GENERA	COUNT	7/ 9/75 GENERA	COUNT	11/ 7/75 GENERA	COUNT
CENTRIC DIATOM	684	FRAGILARIA	3646	NITZSCHIA	316
NITZSCHIA	650	CHROOMONAS	413	CENTRIC DIATOM	158
CHROOMONAS	304	MELOSIRA	413	CHROOMONAS	158
CHLAMYDOMONAS	171	ASTERIONELLA	69	NAVICULA	158
OMITYLOCOCCOPSIS	68	SCHROEDERIA	69	MELOSIRA	105
OTHER	103	OTHER	0	OTHER	264
TOTAL	1984	TOTAL	4610	TOTAL	1159

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	187620.	187625.
NITROGEN	**********	**********	210.	854200.	854410.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	87485.	48.	9.53
NITROGEN	749840.	12.	43.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CARSON RIVER	12.410	4229.5	0.284	1.260	31.	130.
THORNE CANAL	4.350	**********	0.233	1.316	**********	**********

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
UNNAMED CREEK C1	0.438	2.500

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEVADA

NAME = LAKE MEAD (OLIGO-MESOTROPHIC)
COUNTY = CLARK, MAS MOHAVE, AZ
STORET NO. = 3201 WORKING PAPER NO. 880. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	434681.00	592.00	59.1	377.340	3.5

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
138.	815.	5.9	0.016	0.005	0.340	0.550

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME			
3.1	0.1 - 0.7 (9)	(2/24/75) P	(6/11/75) P	(11/20/75) P	(12/11/75) P

SUMMARY OF PHYTOPLANKTON DATA

2/24/75 GENERA	COUNT	6/11/75 GENERA	COUNT	11/20/75 GENERA	COUNT	12/ 1/75 GENERA	COUNT
CHROOMONAS	511	CHROOMONAS	110	RAPHIDIOPSIS	1056	CHROOMONAS	170
CRYPTOMONAS	48	RHOICOSPHENIA	44	CHROOMONAS	624	RAPHIDIOPSIS	43
TETRACORON	48			ANABAENOPSIS	240		
				CENTRIC DIATOM	240		
				CRYPTOMONAS	96		
OTHER	0	OTHER	0	OTHER	96	OTHER	0
TOTAL	603	TOTAL	154	TOTAL	2352	TOTAL	213

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	322955.	**********	10.	3370770.	3692835.
NITROGEN	941525.	**********	375.	25918510.	26880405.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	247325.	93.	6.23
NITROGEN	11986385.	55.	45.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
COLORADO RIVER	378.210	378138.9	0.233	1.909	8.	64.
MUDDY RIVER	0.498	21238.0	0.375	1.800	0.2	1.
VIRGIN RIVER	4.429	15255.1	1.047	1.795	13.	20.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEVADA

NAME = PIPE PATCH RESERVOIR (EUTROPHIC)
COUNTY = PERSHING
STORET NO. = 3214 WORKING PAPER NO. 809, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	41699.00	46.14	4.6	7.170	1.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
345.	736.	0.8	0.095	0.039	0.050	0.620

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
4.8	0.5 - 6.2 (4)	(6/ 2/75) N	(7/11/75) N	(11/ 7/75) N

SUMMARY OF PHYTOPLANKTON DATA

6/ 1/75		7/11/75		11/ 7/75	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
GENTRIC DIATOM	30	CRYPTOMONAS	34	CHROOMONAS	889
		NIT/SCHIA	34	SCHROEDERIA	727
				CHLAMYDOMONAS	566
				OOCYSTIS	242
				PANDORINA	162
OTHER	0	OTHER	0	OTHER	162
TOTAL	30	TOTAL	68	TOTAL	2748

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	54495.	54495.
NITROGEN	**********	**********	**********	291585.	291585.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	27770.	49.	1.18
NITROGEN	201970.	31.	6.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
HUMBOLDT RIVER	6.610	40653.0	0.397	1.372	1.	6.
PITT-TAYLOR DIV. CANAL	0.450	**********	0.485	1.378	**********	**********

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
PITT TAYLOR RES. OUTLET	0.203	1.360

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEVADA

NAME = LAKE TAHOE (OLIGOTROPHIC)
COUNTY = CARSON CITY, DOUGLAS, WASHOE, YAVAPAI, EL DORADO, PLACER, CA
STORET NO. = 3245 WORKING PAPER NO. 810, NTIS ACCESSION NO. PB-282 053/AM

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	1387.00	501.87	397.0	17.859	477.0

II. WATER QUALITY CHARACTERISTICS

MEDIAN CHLOROPHYLL A (UG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
45.	70.	12.8	0.005	0.003	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
0.0	0.1 - 0.2 (6)	(3/18/75) N	(6/27/75) N	(11/ 4/75) P

SUMMARY OF PHYTOPLANKTON DATA

3/18/75 GENERA	COUNT	GENERA	7/ 2/75 COUNT	GENERA	11/ 4/75 COUNT
NITZSCHIA	35	NITZSCHIA	302	CENTRIC DIATOM	6
STEPHANODISCUS	35			CYMBELLA	6
				GYMNODINIUM	3
OTHER	0	OTHER	0	OTHER	0
TOTAL	70	TOTAL	302	TOTAL	15

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	20675.	20675.
NITROGEN	**********	**********	**********	831030.	831030.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3660.	43.	0.04
NITROGEN	74385.	41.	1.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UPPER TRUCKEE RIVER	3.350	141.9	0.020	0.499	14.	398.
ward CREEK	0.880	25.1	0.016	0.354	16.	412.
TAHO CREEK	0.230	15.5	0.029	0.434	16.	200.
INCLT CREEK	1.340	104.6	0.035	0.478	14.	120.
TAYLOR CREEK	1.510	48.9	0.015	0.547	13.	474.
GENERAL CREEK	0.740	19.9	0.017	0.453	19.	530.
MCKINNEY CREEK	0.480	13.2	0.012	0.398	12.	500.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
UNNAMED CREEK CJ	0.010	0.507
MILL CREEK 51	0.055	0.688
SECRET HARBOR CREEK	0.029	1.004
GLENBROOK CANYON CR	0.042	1.042

DEEP CREEK	0.076	0.534
KINGWOOD CREEK	0.039	0.374
MEADOWLY VALLEY CREEK	0.026	0.980
LONELY GULCH CREEK	0.025	0.870

COMPENDIUM OF NATIONAL EUTHOPHICATION SURVEY LAKES IN NEVADA

NAME = TUPAZ LAKE (EUTROPHIC)
COUNTY = DOUGLAS, NV; MONO, CA
STORET NO. = 3746 WORKING PAPER NO. 811. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	1080.00	9.71	15.8	6.810	264.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
Fe.	99.	3.1	0.958	0.042	0.160	0.440

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
7.9	0.4 - 0.3 (2)	(3/19/75) N (7/ 1/75) N (11/ 5/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/19/75 GENERA	COUNT	6/30/75 GENERA	COUNT	7/ 1/75 GENERA	COUNT	11/ 5/75 GENERA	COUNT
CENTRIC DIATOM	198	FRAGILARIA	5059	FRAGILARIA	4766	CHYPTOMONAS	224
FRAGILARIA	159	ASTERIONELLA	670	APHANIZOMENON	801	FRAGILARIA	112
DICTYOSPHAERIUM	119	CHROOMONAS	335	ASTERIONELLA	521	STAURASTRUM	112
MELOSIRA	119	APHANIZOMENON	274	CHROOMONAS	320	MELOSIRA	56
CHROOMONAS	79	CRYPTOMONAS	30	MELOSIRA	160	STEPHANODISCUS	19
OTHER	39	OTHER	32	OTHER	80	OTHER	37
TOTAL	713	TOTAL	6400	TOTAL	6648	TOTAL	560

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	13180.	13180.
NITROGEN	**********	**********	10.	125860.	125870.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	6195.	53.	1.36
NITROGEN	195470.	LOSS	13.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CANAL #1	6.750	1068.9	0.060	0.506	12.	109.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
CALIFORNIA CREEK	0.115	0.900
SLINKARD CREEK	0.123	0.715

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEVADA

NAME - UPPER PAHRANAGAT (EUTROPHIC)
COUNTY - LINCOLN
STORET NO. - 3247 WORKING PAPER NO. 812, NTIS ACCESSION NO. PB-282 471/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	6845.53	0.97	0.6	0.200	57.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
635.	775.	0.8	0.173	0.026	0.125	0.800

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
**********	0.2	(5/ 6/75) N	(8/21/75) N	(11/21/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 6/75 GENERA	COUNT	8/21/75 GENERA	COUNT	11/21/75 GENERA	COUNT
CHROOMONAS	425	MERISMOPEDIA	37034	PENNATE DIATOMS	899
SCHROEDERIA	196	EUGLENA	946	NAVICULA	623
CRYPTOMONAS	163	CYCLOTELLA	883	CHROOMONAS	254
ANKISTRODESMUS	65	PENNATE DIATOMS	568	CYLINDROTHECA	231
QUADRIGULA	65	PHACUS	252	NITZSCHIA	231
OTHER	34	OTHER	1324	OTHER	436
TOTAL	948	TOTAL	41807	TOTAL	2674

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	1265.	1265.
NITROGEN	**********	**********	**********	11295.	11295.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	360.	72.	1.30
NITROGEN	5525.	51.	11.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WHITE RIVER #1	0.228	6765.1	0.150	1.402	0.1	1.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEVADA

NAME - WALKER LAKE (EUTROPHIC)
COUNTY - MINERAL
STORET NO. - 3211 WORKING PAPER NO. 813. NTIS ACCESSION NO. PB-282 339/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	153.78	24.1	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
3760.	7094.	2.4	0.601	0.574	0.080	2.020

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/17/75) N	(7/11/75) N	(11/ 6/75) N
3.4	**********			

SUMMARY OF PHYTOPLANKTON DATA

3/17/75 GENERA	COUNT	7/ 9/75 GENERA	COUNT	11/ 6/75 GENERA	COUNT
PENNATE DIATOMS	27	CHROOCOCCUS	19	NAVICULA	6
CHROOMONAS	16				
TETRAEDRON	5				
OTHER	0	OTHER	0	OTHER	0
TOTAL	48	TOTAL	19	TOTAL	6

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEVADA

NAME - WASHOE LAKE (EUTROPHIC)
COUNTY - WASHOE
STORET NO. - 3208 WORKING PAPER NO. 814. NTIS ACCESSION NO. PB-282 432/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	215.00	16.59	1.5	0.870	5.7

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
359.	445.	0.0	0.403	0.268	0.130	1.340

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/17/75) N	(6/27/75) N	(11/10/75) N
11.6	4.4			

SUMMARY OF PHYTOPLANKTON DATA

3/17/75		6/27/75		11/11/75	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
MELOSIRA	671	MELOSIRA	859	MELOSIRA	1111
CHROOMONAS	79	CRYPTOMONAS	136	EPITHEMIA	115
CRYPTOMONAS	79	EUGLENA	136	FRAGILARIA	115
RHOPALODIA	79	RHOPALODIA	136	STAURONEIS	77
		FRAGILARIA	90	SURIRELLA	38
OTHER	0	OTHER	315	OTHER	229
TOTAL	908	TOTAL	1672	TOTAL	1685

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	1735.	1735.
NITROGEN	**********	**********	**********	34770.	34770.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1770.	LOSS	0.10
NITROGEN	8875.	74.	2.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
OPHIR CREEK	0.130	16.8	0.035	0.402	8.	115.
FRANKTOWN CREEK	0.240	39.6	0.046	0.617	8.	66.
WINTERS CREEK	0.020	4.7	0.034	0.555	4.	79.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
GALENA CREEK	0.029	0.376
JONES CREEK	0.024	0.497

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEVADA

NAME - WILD HORSE RESERVOIR (EUTROPHIC)
COUNTY - ELKO
STORET NO. - 3209 WORKING PAPER NO. 815. NTIS ACCESSION NO. PB-282 427/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	541.30	12.14	7.3	1.210	2.4

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
76.	100.	0.3	0.114	0.065	0.320	0.920

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
75.5	7.7 - 15.4 (3)	(5/30/75) N	(8/ 1/75) N	(11/ 6/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/30/75 GENERA	COUNT	8/ 1/75 GENERA	COUNT	11/ 6/75 GENERA	COUNT
CENTRIC DIATOM	8958	GLOEOTRICHIA	541	CHROOMONAS	196
FRAGILARIA	444	FRAGILARIA	496	APHANIZOMENON	33
CRYPTOMONAS	121	APHANIZOMENON	270	TRACHELOMONAS	33
PHORMIDIUM	121	APHANOTHECE	90	SCHROEDERIA	33
LYNGBYA	81	COCCONEIS	90		
OTHER	80	OTHER	225	OTHER	0
TOTAL	9805	TOTAL	1712	TOTAL	295

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	7985.	7985.
NITROGEN	**********	**********	**********	133465.	133465.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	10415.	LOSS	0.66
NITROGEN	61640.	54.	11.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
OWYHEE RIVER	0.540	145.0	0.157	1.317	17.	256.
DEEP CREEK	0.200	42.5	0.086	1.271	12.	183.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
PENROD CREEK	0.087	1.000

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEVADA

NAME - WILSON RESERVOIR (EUTROPHIC)
COUNTY - ELKO
STORET NO. - 3210 WORKING PAPER NO. 816, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	240.90	3.35	3.9	0.270	5.1

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
72.	96.	7.7	0.049	0.016	0.120	0.520

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
10.0	1.6 - 10.0 (2)	(6/ 1/75) N	(8/ 1/75) N	(11/ 6/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/31/75 GENERA	COUNT	8/ 1/75 GENERA	COUNT	11/ 6/75 GENERA	COUNT
CRYPTOMONAS	1609	FLAGELLATES	210	PENNATE DIATOMS	446
CHROOMONAS	623	GYMNODINIUM	84	FRAGILARIA	377
NITZSCHIA	260	TETRAEDRON	42	CHROOMONAS	343
SYNEDRA	52	SCENEDESMUS	42	APHANIZOMENON	137
				EPITHEMIA	69
OTHER	0	OTHER	0	OTHER	207
TOTAL	2544	TOTAL	378	TOTAL	1579

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	700.	700.
NITROGEN	**********	**********	10.	10510.	10520.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	700.	0.	0.21
NITROGEN	15490.	LOSS	3.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WILSON CREEK	0.260	208.8	0.227	1.680	3.	29.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
COLUMBIA CREEK	0.063	0.600
BULL CREEK	0.096	0.924

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW MEXICO

NAME - ALAMOGORDO RESERVOIR (EUTROPHIC)
COUNTY - DE BACA, GUADALUPE
STORET NO. - 3501 WORKING PAPER NO. 817, NTIS ACCESSION NO. PB-278 517/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	11370.10	18.49	8.1	2.770	1.7

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
108.	1959.	0.8	0.025	0.003	0.050	0.320

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 1/75) N	(8/20/75) P	(10/ 2/75) P
5.9	0.4			

SUMMARY OF PHYTOPLANKTON DATA

5/ 1/75 GENERA	COUNT	8/20/75 GENERA	COUNT	10/ 2/75 GENERA	COUNT
CHROOMONAS	759	RAPHIDIOPSIS	395	CHROOMONAS	979
ANKISTRODESMUS	715	NITZSCHIA	395	FLAGELLATES	793
RAPHIDIOPSIS	223	OSCILLATORIA	346	DACTYLOCOCCOPSIS	746
CRYPTOMONAS	40	OOCYSTIS	197	ANACYSTIS(MICROCYSTIS)	746
		CRYPTOMONAS	148	MERISMOPEDIA	670
OTHER	0	OTHER	840	OTHER	2828
TOTAL	1737	TOTAL	2321	TOTAL	6762

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2625.	**********	20.	25415.	28060.
NITROGEN	9920.	**********	800.	106885.	117605.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3580.	87.	1.52
NITROGEN	68495.	42.	6.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PECOS RIVER	2.540	10282.3	0.292	1.067	2.	8.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW MEXICO

NAME - BLUEWATER LAKE (MESO-EUTROPHIC)
COUNTY - MCKINLEY, VALENCIA
STORET NO. - 3502 WORKING PAPER NO. 818, NTIS ACCESSION NO. PB-278 497/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	520.60	7.07	6.7	0.260	5.8

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
126.	349.	0.5	0.036	0.012	0.140	0.700

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 5/75)	(8/19/75)	(10/ 1/75)
3.9	0.2 - 1.2 (2)	N	N	P

SUMMARY OF PHYTOPLANKTON DATA

5/ 5/75		8/19/75		10/ 1/75	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
FLAGELLATES	570	APHANIZOMENON	1213	CHROOMONAS	432
CYCLOTELLA	342	CHLAMYDOMONAS	152	APHANIZOMENON	351
CHROOMONAS	171	CHROOMONAS	152	CRYPTOMONAS	54
SCHROEDERIA	171	CRYPTOMONAS	114		
CHLAMYDOMONAS	114	CYCLOTELLA	76		
OTHER	229	OTHER	74	OTHER	0
TOTAL	1597	TOTAL	1781	TOTAL	837

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	590.	590.
NITROGEN	**********	**********	45.	14620.	14665.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	475.	19.	0.08
NITROGEN	9350.	36.	2.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BLUEWATER CREEK	0.090	195.3	0.040	0.748	0.6	11.
COTTONWOOD CREEK	0.090	167.8	0.092	0.995	1.	15.
UNNAMED STREAM (C1)	0.010	15.8	0.040	0.996	0.6	17.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW MEXICO

NAME - CONCHAS RESERVOIR (MESOTROPHIC)
COUNTY - SAN MIGUEL
STORET NO. - 3503 WORKING PAPER NO. 819. NTIS ACCESSION NO. PB-278 540/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	19189.30	38.83	11.8	4.760	3.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
152.	751.	1.2	0.020	0.004	0.040	0.350

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
3.3	0.1 - 0.4 (3)	(5/ 1/75) N	(8/21/75) N	(10/ 2/75) P

SUMMARY OF PHYTOPLANKTON DATA

5/ 1/75 GENERA	COUNT	8/21/75 GENERA	COUNT	10/ 2/75 GENERA	COUNT
CHROOMONAS	915	CHROOMONAS	402	CHROOMONAS	118
ANKISTRODESMUS	335	OOCYSTIS	183	CRYPTOMONAS	59
OOCYSTIS	134	ANKISTRODESMUS	110	TRACHELOMONAS	29
ASTERIONELLA	45	OSCILLATORIA	73	SCENEDESMUS	29
		CRYPTOMONAS	37	ANKISTRODESMUS	29
OTHER	0	OTHER	72	OTHER	30
TOTAL	1429	TOTAL	877	TOTAL	294

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	40.	11410.	11450.
NITROGEN	**********	**********	1520.	179890.	181410.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	690.	94.	0.29
NITROGEN	624795.	LOSS	4.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CANADIAN RIVER	3.840	15578.8	0.084	0.847	0.6	7.
CONCHAS RIVER	0.400	1354.6	0.010	0.807	0.1	12.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
CONCHAS CANAL	0.019	0.683
THEMENTINA CREEK	0.420	2.020

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW MEXICO

NAME - EAGLE NEST LAKE
COUNTY - COLFAX
STORET NO. - 3504

(EUTROPHIC)

WORKING PAPER NO. 820. NTIS ACCESSION NO. PB-278 548/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	432.50	9.82	9.9	0.580	5.3

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
149.	275.	1.1	0.181	0.132	0.070	0.520

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
13.4	2.0 - 14.0 (2)	(5/ 6/75) N	(8/21/75) N	(10/ 7/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 6/75 GENERA	COUNT	8/21/75 GENERA	COUNT	10/ 7/75 GENERA	COUNT
CRYPTOMONAS	3042	APHANIZOMENON	389	APHANIZOMENON	3639
CHROOMONAS	1703	CHROOMONAS	130	CHROOMONAS	1178
		STEPHANODISCUS	32	OSCILLATORIA	659
		CRYPTOMONAS	32	CRYPTOMONAS	173
		SCHROEDERIA	32	SCHROEDERIA	35
OTHER	0	OTHER	66	OTHER	0
TOTAL	4745	TOTAL	681	TOTAL	5684

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	2630.	2630.
NITROGEN	**********	**********	65.	42210.	42275.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3120.	LOSS	0.27
NITROGEN	32270.	24.	4.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MORENO CREEK	0.220	191.1	0.152	1.444	7.	68.
SIXMILE CREEK	0.070	27.2	0.077	1.219	7.	110.
CIENEGUILLA CREEK	0.200	145.0	0.152	1.691	5.	73.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW MEXICO

NAME - ELEPHANT BUTTE RESERVOIR (EUTROPHIC)
COUNTY - SIERRA, SOCORRO
STORET NO. - 3505 WORKING PAPER NO. 821. NTIS ACCESSION NO. PB-278 498/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	76275.40	148.05	18.3	38.310	2.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
133.	600.	0.6	0.083	0.052	0.110	0.440

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.8	2.4 - 10.6 (2)	(5/ 2/75) N	(8/19/75) N	(10/ 3/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 2/75 GENERA	COUNT	8/19/75 GENERA	COUNT	10/ 3/75 GENERA	COUNT
STEPHANODISCUS	722	STEPHANODISCUS	437	PENNATE DIATOMS	41
CHROOMONAS	611	CARTERIA	328	CHROOMONAS	21
COELASTRUM	56	CHROOMONAS	273		
ANKISTRODESMUS	56	ANACYSTIS(MICROCYSTIS)	109		
		SCHROEDERIA	109		
OTHER	0	OTHER	300	OTHER	0
TOTAL	1445	TOTAL	1556	TOTAL	62

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	540360.	**********	5.	2028905.	2569270.
NITROGEN	1440480.	**********	150.	5804095.	7244725.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	83595.	97.	17.35
NITROGEN	1141900.	84.	48.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
RIO GRANDE	37.070	71742.9	1.902	5.690	28.	78.
UNNAMED TRIBUTARY (C1)	0.010	5.7	0.028	0.541	18.	757.
UNNAMED STREAM (E1)	0.010	41.3	0.013	0.744	0.1	6.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
RIO GRANDE CONVEYANCE	0.883	2.587

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW MEXICO

NAME - EL VADO RESERVOIR (MESO-EUTROPHIC)
COUNTY - RIO ARRIBA
STORET NO. - 3506 WORKING PAPER NO. 822. NTIS ACCESSION NO. PB-278 500/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2012.40	13.07	18.3	8.530	326.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
80.	170.	0.8	0.034	0.014	0.140	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
2.2	0.3 - 2.4 (2)	(5/ 5/75) P AND N (8/19/75) N (10/ 1/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

5/ 5/75 GENERA	COUNT	8/19/75 GENERA	COUNT	10/ 1/75 GENERA	COUNT
CRYPTOMONAS	154	CHROOMONAS	490	APHANIZOMENON	234
CHROOMONAS	92	APHANIZOMENON	31	CHROOMONAS	176
CYCLOTELLA	31			CRYPTOMONAS	79
NITZSCHIA	31				
OTHER	0	OTHER	0	OTHER	0
TOTAL	308	TOTAL	521	TOTAL	489

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1375.	**********	5.	33540.	34920.
NITROGEN	3000.	**********	115.	251875.	254990.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	16285.	53.	2.67
NITROGEN	269615.	LOSS	19.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
RIO CHAMA	6.180	1243.2	0.108	0.968	19.	153.
WILLOW CREEK	1.940	499.9	0.057	0.929	7.	60.
BOULDER CREEK	0.130	188.8	2.430	4.077	25.	72.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW MEXICO

NAME - LAKE MCMILLAN (EUTROPHIC)
COUNTY - EDDY
STORET NO. - 3507 WORKING PAPER NO. 823. NTIS ACCESSION NO. PB-278 495/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	44004.10	23.05	2.1	6.950	81.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
104.	3998.	0.3	0.097	0.009	0.045	0.470

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
14.1	0.2 - 3.2 (2)	(5/ 1/75) P AND N (8/20/75) N (10/ 2/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 1/75 GENERA	COUNT	8/20/75 GENERA	COUNT	10/ 2/75 GENERA	COUNT
ACHNANTHES	2733	NITZSCHIA	770	NITZSCHIA	2718
CYCLOTELLA	1997	OSCILLATORIA	147	OSCILLATORIA	614
LUNATE CELLS	1682	EUGLENA	147	ANABAENA	380
CHROOMONAS	420	CRYPTOMONAS	37	EUGLENA	146
OOCYSTIS	315	CYCLOTELLA	37	BINUCLEARIA	146
OTHER	210	OTHER	36	OTHER	380
TOTAL	7357	TOTAL	1174	TOTAL	4384

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	13610.	**********	**********	10625.	24235.
NITROGEN	40810.	**********	**********	430120.	470930.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	16860.	30.	1.05
NITROGEN	641260.	LOSS	20.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PECOS RIVER	6.690	42597.2	0.123	1.681	0.2	8.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
OVERFLOW OUTLET	0.043	1.605
PECOS RIVER (W CHANNEL)	0.230	1.910
UNNAMED CREEK (D1)	0.022	5.920

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW MEXICO

NAME - UTE RESERVOIR
COUNTY - QUAY
STORET NO. - 3509

(MESOTROPHIC)

WORKING PAPER NO. 824. NTIS ACCESSION NO. PB-278 494/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	28852.60	16.79	8.0	3.020	1.4

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
274.	843.	1.3	0.021	0.004	0.040	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
3.2	0.2 - 0.2 (2)	(5/ 2/75) N (8/20/75) N (10/ 3/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

5/ 2/75 GENERA	COUNT	8/20/75 GENERA	COUNT	10/ 3/75 GENERA	COUNT
CHROOMONAS	490	CHROOMONAS	280	CRYPTOMONAS	142
CRYPTOMONAS	286	SYNEDRA	224	SYNEDRA	85
FRAGILARIA	82	MERISMOPEDIA	224	OOCYSTIS	57
CYCLOTELLA	41	CRYPTOMONAS	205	MERISMOPEDIA	57
		DACTYLOCOCCOPSIS	149	CLOSTERIUM	57
OTHER	0	OTHER	298	OTHER	113
TOTAL	899	TOTAL	1380	TOTAL	511

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	11225.	11225.
NITROGEN	**********	**********	**********	61230.	61230.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1095.	90.	0.67
NITROGEN	184455.	LOSS	3.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ROMERO DRAW	0.030	45.3	0.082	1.550	2.	32.
PAJARITO CREEK	0.250	1263.9	1.259	3.415	8.	21.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OREGON

NAME - BROWNLEE RESERVOIR (EUTROPHIC)
COUNTY - BAKER, OR: WASHINGTON, ID
STORET NO. - 4101 WORKING PAPER NO. 827. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	188033.90	56.66	31.6	535.556	39.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
137.	309.	1.8	0.079	0.043	0.560	0.910

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
16.2	**********	(4/ 9/75) P AND N (8/ 4/75) P AND N (9/15/75) N

SUMMARY OF PHYTOPLANKTON DATA

4/ 9/75 GENERA	COUNT	8/ 4/75 GENERA	COUNT	9/15/75 GENERA	COUNT
STEPHANODISCUS	9749	FRAGILARIA	1312	MELOSIRA	2705
ASTERIONELLA	603	MELOSIRA	150	APHANIZOMENON	312
SURIRELLA	235	CHROOMONAS	150	SCHROEDERIA	35
NAVICULA	168	CRYPTOMONAS	37	NAVICULA	35
MELOSIRA	101				
OTHER	267	OTHER	0	OTHER	0
TOTAL	11123	TOTAL	1649	TOTAL	3087

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	4550.	50570.	990.	1890725.	1946835.
NITROGEN	61170.	160530500.	440500401.	30973275.	632065346.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1023210.	47.	34.36
NITROGEN	18218785.	97.	11155.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SNAKE RIVER	507.920	180004.9	0.129	1.852	10.	168.
EAGLE CREEK	7.670	507.6	0.045	0.667	29.	341.
POWDER RIVER	6.980	3548.3	0.149	1.197	11.	93.
ROCK CREEK	0.075	42.2	0.079	0.918	5.	54.
BURNT RIVER	3.900	2830.9	0.157	1.131	9.	54.
LITTLE ROCK CREEK	0.041	31.9	0.096	1.063	4.	46.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
BROWNLEE CREEK	0.065	0.883
DENNETT CREEK	0.031	1.274
TRAIL CREEK	0.097	0.928

HENLEY CREEK	0.110	0.548

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OREGON

NAME - DIAMOND LAKE (MESO-EUTROPHIC)
COUNTY - DOUGLAS
STORET NO. - 4102 WORKING PAPER NO. 828. NTIS ACCESSION NO. PB-281 809/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	••••••••••	13.00	6.9	••••••••••	••••••

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
22.	26.	5.2	0.028	0.011	0.040	0.370

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
7.3	••••••••••	(7/16/75) N	(10/31/75) N

SUMMARY OF PHYTOPLANKTON DATA

7/16/75 GENERA	COUNT	10/31/75 GENERA	COUNT
ASTERIONELLA	2113	STEPHANODISCUS	402
ANABAENA	31	CYCLOTELLA	331
CHROOMONAS	31	CHROOMONAS	47
		CYMBELLA	24
		EPITHEMIA	24
OTHER	0	OTHER	22
TOTAL	2175	TOTAL	850

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	••••••••••	••••••••••	••••••••••	••••••••••	••••••••••
NITROGEN	••••••••••	••••••••••	••••••••••	••••••••••	••••••••••

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	••••••••••	•••••	••••••••••
NITROGEN	••••••••••	•••••	••••••••••

•••• LAKE SAMPLING ONLY ••••

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OREGON

NAME - HELLS CANYON RESERVOIR (EUTROPHIC)
COUNTY - BAKER, WALLOWA, OR; ADAMS, IDAHO, ID
STORET NO. - 4103
WORKING PAPER NO. 829, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	189846.90	10.12	20.4	553.950	4.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
138.	263.	1.8	0.068	0.045	0.640	0.830

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)
18.7	**********

LIMITING NUTRIENT AT SAMPLING TIME

(4/ 8/75) P (8/ 4/75) N (9/15/75) N

SUMMARY OF PHYTOPLANKTON DATA

GENERA	4/ 8/75 COUNT	GENERA	8/ 4/75 COUNT	GENERA	9/15/75 COUNT
STEPHANODISCUS	7332	FRAGILARIA	6928	CHROOMONAS	795
ASTERIONELLA	296	MELOSIRA	3322	MELOSIRA	614
MELOSIRA	148	ASTERIONELLA	608	STEPHANODISCUS	36
FRAGILARIA	111	SKELETONEMA	405	CRYPTOMONAS	36
SURIRELLA	111	CRYPTOMONAS	162	SCHROEDERIA	36
OTHER	334	OTHER	163	OTHER	0
TOTAL	8332	TOTAL	11588	TOTAL	1517

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	942285.	942285.
NITROGEN	**********	**********	**********	25888790.	25888790.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION
PHOSPHORUS	1017465.	LOSS
NITROGEN	21630255.	16.

LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
93.11
2558.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SNAKE RIVER	532.660	188810.9	**********	**********	5.	134.
INDIAN CREEK	1.940	102.8	**********	**********	39.	670.
PINE CREEK	10.860	595.7	**********	**********	51.	616.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
KINNEY CREEK	0.042	0.654

NAME - HILLS CREEK RESERVOIR (EUTROPHIC)
COUNTY - LANE
STORET NO. - 4104

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OREGON

WORKING PAPER NO. 830. NTIS ACCESSION NO. PB-281 857/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1007.50	11.07	39.2	33.040	152.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
25.	35.	1.6	0.038	0.027	0.060	0.230

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
2.3	**********	(3/28/75) N (7/16/75) N (10/30/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/28/75 GENERA	COUNT	7/16/75 GENERA	COUNT	10/30/75 GENERA	COUNT
CHROOMONAS	219	FRAGILARIA	1569	MELOSIRA	4118
CRYPTOMONAS	17	CRYPTOMONAS	297	ASTERIONELLA	223
		ASTERIONELLA	212	FRAGILARIA	148
		CHROOMONAS	42	CHLAMYDOMONAS	111
OTHER	0	OTHER	0	CENTRIC DIATOM	111
				OTHER	75
TOTAL	236	TOTAL	2120	TOTAL	4786

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	30.	40540.	40540.
NITROGEN	**********	**********		201335.	201365.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	36130.	11.	3.66
NITROGEN	256375.	LOSS	18.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MIDDLE FK. WILLAMETTE R.	22.370	668.2	0.040	0.172	43.	179.
HILLS CREEK	4.310	136.5	0.033	0.222	32.	226.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
BUCK CREEK	0.041	0.230
COFFEEPOT CREEK	0.050	0.274

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OREGON

NAME - LAKE OWYHEE (EUTROPHIC)
COUNTY - MALHEUR
STORET NO. - 4105 WORKING PAPER NO. 831. NTIS ACCESSION NO. PB-281 799/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	28904.40	56.25	24.6	27.180	1.7

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
83.	150.	0.5	0.095	0.064	0.425	0.780

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
3.4	8.2	(4/ 8/75) N	(8/ 1/75) N	(9/16/75) N

SUMMARY OF PHYTOPLANKTON DATA

4/ 8/75 GENERA	COUNT	8/ 1/75 GENERA	COUNT	9/16/75 GENERA	COUNT
CYCLOTELLA	207	COELOSPHAERIUM	304	APHANIZOMENON	409
CHROOMONAS	207	CRYPTOMONAS	154	CHROOMONAS	204
CHLAMYDOMONAS	69	APHANIZOMENON	101		
PHORMIDIUM	69	PHORMIDIUM	101		
CRYPTOMONAS	34	SCENEDESMUS	51		
OTHER	68	OTHER	0	OTHER	0
TOTAL	654	TOTAL	711	TOTAL	613

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	30.	99555.	99585.
NITROGEN	**********	**********	1065.	1098735.	1099800.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	101020.	LOSS	1.77
NITROGEN	1017855.	7.	19.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
OWYHEE RIVER	25.520	20720.0	0.115	1.211	4.	47.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
DRY CREEK	0.086	0.870
BIRCH CREEK	0.102	1.241
CROOKED CREEK	0.047	1.372

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OREGON

NAME - OXBOW RESERVOIR (EUTROPHIC)
COUNTY - BAKER, OR; ADAMS, ID
STORET NO. - 4106 WORKING PAPER NO. 832. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	188810.90	5.66	11.4	532.660	1.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
131.	265.	1.9	0.071	0.040	0.690	0.910

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
10.3	**********	(4/ 9/75) P	(8/ 4/75) N	(9/15/75) N

SUMMARY OF PHYTOPLANKTON DATA

4/ 9/75 GENERA	COUNT	8/ 4/75 GENERA	COUNT	9/15/75 GENERA	COUNT
STEPHANODISCUS	5621	FRAGILARIA	433	MELOSIRA	807
ASTERIONELLA	300	STEPHANODISCUS	31	CYCLOTELLA	70
MELOSIRA	257			CRYPTOMONAS	35
SURIRELLA	43				
CHROOMONAS	43				
OTHER	44	OTHER	0	OTHER	0
TOTAL	6308	TOTAL	464	TOTAL	912

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	1038645.	1038645.
NITROGEN	**********	**********	**********	18480225.	18480225.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	895060.	14.	183.51
NITROGEN	25222530.	LOSS	3265.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SNAKE RIVER	526.270	188033.9	0.062	1.512	5.	97.
WILDHORSE RIVER	4.920	458.4	0.038	0.727	20.	331.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OREGON

NAME - SUTTLE LAKE
COUNTY - JEFFERSON
STORET NO. - 4107

(MESO-EUTROPHIC)

WORKING PAPER NO. 833. NTIS ACCESSION NO. PB-281 870/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	57.50	1.09	9.9	1.447	87.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
27.	47.	10.3	0.031	0.020	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)
9.2	0.4

LIMITING NUTRIENT AT SAMPLING TIME

(3/28/75) N (7/16/75) N (10/31/75) N

SUMMARY OF PHYTOPLANKTON DATA

3/28/75 GENERA	COUNT	7/16/75 GENERA	COUNT	10/31/75 GENERA	COUNT
MELOSIRA	1374	ANABAENA	1263	STEPHANODISCUS	637
DACTYLOCOCCOPSIS	153	ASTERIONELLA	90	FRAGILARIA	495
SYNEDRA	38			CHROOMONAS	283
				CRYPTOMONAS	106
OTHER	0	OTHER	0	ASTERIONELLA	35
				OTHER	142
TOTAL	1565	TOTAL	1353	TOTAL	1698

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	10.	1845.	1855.
NITROGEN	**********	**********	345.	18820.	19165.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1355.	27.	1.70
NITROGEN	29455.	LOSS	17.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BLUE LAKE OUTLET	1.350	46.9	0.034	0.364	32.	313.

NAME - WALDO LAKE
COUNTY - LANE
STORET NO. - 4108

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OREGON

(OLIGOTROPHIC)

WORKING PAPER NO. 834, NTIS ACCESSION NO. PB-281 871/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	26.70	35.6	**********	21.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	3.	15.2	0.005	0.006	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
0.4	0.1	(7/16/75) N (10/30/75) P

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION
PHOSPHORUS	**********	*****
NITROGEN	**********	*****

LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
****
****

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - BEAR LAKE (OLIGOTROPHIC)
COUNTY - RICH, UT; BEAR LAKE, ID
STORET NO. - 4901 WORKING PAPER NO. 836. NTIS ACCESSION NO. PB-279 105/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	1030.80	171.59	10.2	2.546	21.9

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
374.	543.	6.3	0.011	0.003	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
0.9	**********	(5/14/75) N (8/ 6/75) P AND N (9/19/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

5/14/ 0		8/ 6/ 0		9/19/ 0	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
ANKISTRODESMUS	1003	LAGERHEIMIA	95	LYNGBYA	181
CHROOMONAS	56	KIRCHNERIELLA	95	OOCYSTIS	181
		CRYPTOMONAS	48	ELAKATOTHRIX	135
		OSCILLATORIA	48	CHROOMONAS	135
OTHER	0	OTHER	0	OTHER	0
TOTAL	1059	TOTAL	286	TOTAL	632

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	95.	14645.	14740.
NITROGEN	**********	**********	3515.	467505.	471020.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	4925.	67.	0.09
NITROGEN	124190.	74.	2.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BIG CREEK	0.530	246.0	0.084	1.213	6.	82.
INDIAN CREEK	0.006	11.7	0.321	3.530	5.	57.
N. EDEN CANYON	0.317	137.3	0.092	0.573	7.	42.
UNNAMED CREEK E1	0.137	59.6	0.181	0.980	13.	71.
SWAN CREEK	0.510	10.1	0.027	0.394	43.	627.
FISH HAVEN CREEK	0.096	31.1	0.041	0.777	4.	76.
LITTLE CREEK	0.200	93.2	0.030	0.918	2.	62.
PUMPED RETURN FLOW	6.720	**********	0.044	1.460	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - DEER CREEK RESERVOIR (EUTROPHIC)
COUNTY - WASATCH
STORET NO. - 4903 WORKING PAPER NO. 837. NTIS ACCESSION NO. PB-281 899/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1450.40	9.66	19.9	10.676	211.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
142.	303.	1.8	0.038	0.006	0.215	0.585

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
9.1	1.0 - 3.3 (2)	(5/12/75) P (8/11/75) P AND N (9/19/75) P

SUMMARY OF PHYTOPLANKTON DATA

5/12/75 GENERA	COUNT	8/11/75 GENERA	COUNT	9/19/75 GENERA	COUNT
STEPHANODISCUS	5047	FRAGILARIA	7571	APHANIZOMENON	2365
CHROOMONAS	3426	SPHAEROCYSTIS	55	CHROOMONAS	377
FLAGELLATES	2100			FLAGELLATES	240
CRYPTOMONAS	700			STEPHANODISCUS	69
ASTERIONELLA	74			COELOSPHAERIUM	69
OTHER	0	OTHER	0	OTHER	102
TOTAL	11347	TOTAL	7626	TOTAL	3222

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	7360.	4195.	**********	12295.	23850.
NITROGEN	29710.	47000.	**********	234645.	311355.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	15605.	35.	2.47
NITROGEN	242720.	22.	32.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PROVO RIVER	8.230	976.4	0.065	0.885	9.	204.
DECKER CREEK	0.011	4.7	0.059	0.324	6.*	51.*
SNAKE CREEK	1.300	82.9	0.090	1.282	7.*	52.*
DANIELS CREEK	0.100	126.9	0.255	1.242	6.	35.
MAIN CREEK	0.375	186.5	0.119	1.049	7.	68.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
SPRING CREEK	0.300	1.492

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - ECHO RESERVOIR
COUNTY - SUMMIT
STORET NO. - 4904

(EUTROPHIC)

WORKING PAPER NO. 838. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1895.90	5.95	15.3	7.687	134.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
172.	333.	1.3	0.047	0.012	0.170	0.460

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
7.0	**********	(5/12/75) N (8/ 7/75) P AND N (9/18/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/12/75 GENERA	COUNT	8/ 7/75 GENERA	COUNT	9/18/75 GENERA	COUNT
CHROOMONAS	9336	CHROOMONAS	305	FRAGILARIA	918
CENTRIC DIATOM	1221	CRYPTOMONAS	153	CHROOMONAS	598
FRAGILARIA	1103	FRAGILARIA	61	CRYPTOMONAS	160
CRYPTOMONAS	906	ASTERIONELLA	31	APHANIZOMENON	40
ASTERIONELLA	118	ANKISTRODESMUS	31	ASTERIONELLA	40
OTHER	0	OTHER	0	OTHER	0
TOTAL	12684	TOTAL	581	TOTAL	1756

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	3785.	**********	**********	11115.	14900.
NITROGEN	10495.	**********	**********	306120.	316615.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	10165.	32.	2.50
NITROGEN	178965.	43.	53.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WEBER RIVER	5.640	1134.4	0.045	1.211	7.	190.
CHALK CREEK	1.740	655.3	0.032	1.177	3.	99.
UNNAMED CREEK DI	0.080	15.5	0.129	2.037	21.	332.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - FISH LAKE (MESOTROPHIC--EUTROPHIC)
COUNTY - SEVIER
STORET NO. - 4906 WORKING PAPER NO. 839. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	57.00	10.12	25.9	0.143	58.5

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
63.	87.	8.8	0.023	0.004	0.040	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
12.5	**********	(8/12/75) N	(9/25/75) N

SUMMARY OF PHYTOPLANKTON DATA

8/12/75 GENERA	COUNT	9/25/75 GENERA	COUNT
FRAGILARIA	2281	CHLAMYDOMONAS	1103
ANACYSTIS(MICROCYSTIS)	2082	OOCYSTIS	531
CHROOCOCCUS	760	CHROOMONAS	286
NAVICULA	198	KIRCHNERIELLA	123
DINOBRYON	132	LAGERHEIMIA	123
OTHER	925	OTHER	203
TOTAL	6378	TOTAL	2369

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	40.	455.	495.
NITROGEN	**********	**********	1455.	13490.	14945.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	210.	58.	0.05
NITROGEN	3925.	74.	1.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
JORGENSON CREEK	0.056	8.3	0.067	0.464	14.	99.
ROWERY CREEK	0.018	2.6	0.060	0.662	13.	144.
TWIN CREEK	0.009	1.3	0.057	0.631	12.	138.
DOCTOR CREEK	0.004	7.0	0.061	0.606	1.	11.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
ANDERSON CREEK	0.035	0.122

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - HUNTINGTON LAKE (MESOTROPHIC)
COUNTY - EMERY
STORET NO. - 4907 WORKING PAPER NO. 840. NTIS ACCESSION NO. PB-281 873/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	0.93	5.2	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
161.	394.	2.7	0.013	0.005	0.040	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
1.9	**********	(5/13/75) N	(8/12/75) N	(9/24/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/13/75 GENERA	COUNT	8/12/75 GENERA	COUNT	9/24/75 GENERA	COUNT
ANKISTRODESMUS	182	CYCLOTELLA	47	CRYPTOMONAS	333
CHROOMONAS	182	APHANOCAPSA	39	CHROOMONAS	133
CRYPTOMONAS	91	ACHNANTHES	31	MALLOMONAS	33
SYNEDRA	45	CRUCIGENIA	31		
		CRYPTOMONAS	16		
OTHER	0	OTHER	0	OTHER	0
TOTAL	500	TOTAL	164	TOTAL	499

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - JOES VALLEY RESERVOIR (MESOTROPHIC)
COUNTY - EMERY
STORET NO. - 4908

WORKING PAPER NO. 841. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	378.10	4.74	16.3	2.838	316.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
195.	273.	2.5	0.012	0.003	0.045	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
2.5	0.2	(5/13/75) N (8/12/75) P (9/24/75) P

SUMMARY OF PHYTOPLANKTON DATA

5/13/75 GENERA	COUNT	8/12/75 GENERA	COUNT	9/24/75 GENERA	COUNT
FLAGELLATES	1354	CYCLOTELLA	1976	ANACYSTIS(MICROCYSTIS)	610
ANACYSTIS(MICROCYSTIS)	1113	DINOBRYON	476	FRAGILARIA	326
CHROOMONAS	242	CHROOMONAS	256	DINOBRYON	163
CARTERIA	48	ANACYSTIS(MICROCYSTIS)	110	CRYPTOMONAS	41
CRYPTOMONAS	48	CRYPTOMONAS	73		
OTHER	0	OTHER	74	OTHER	39
TOTAL	2805	TOTAL	2965	TOTAL	1179

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	3335.	3335.
NITROGEN	**********	**********	**********	82995.	82995.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2310.	31.	0.70
NITROGEN	87240.	LOSS	17.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LOWRY CREEK	1.470	186.5	0.033	0.649	8.	161.
LITTLES CREEK	0.113	16.6	0.124	0.877	27.	188.
SEELY CREEK	1.200	93.2	0.026	1.132	11.	460.
SWANSEY CREEK	0.023	16.3	0.230	1.223	10.	54.
NORTH DRAGON CREEK	0.002	38.8	0.272	1.861	0.4	3.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - LOWER BOWNS RESERVOIR (MESOTROPHIC)
COUNTY - GARFIELD
STORET NO. - 4902 WORKING PAPER NO. 842. NTIS ACCESSION NO. PB-281 872/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	0.36	0.1	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
70.	120.	4.2	0.031	0.006	0.040	0.530

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 9/75) P	(8/13/75) N	(9/25/75) N
5.6	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/75 GENERA	COUNT	8/13/75 GENERA	COUNT	9/25/75 GENERA	COUNT
CRYPTOMONAS	286	GLOEOTRICHIA	231	CHROOMONAS	970
CHROOMONAS	24	CHROOMONAS	103	APHANOCAPSA	562
		ANABAENA	51	CRYPTOMONAS	357
		ANACYSTIS(MICROCYSTIS)	26	STAURASTRUM	153
				GLOEOTRICHIA	102
OTHER	0	OTHER	0	OTHER	0
TOTAL	310	TOTAL	411	TOTAL	2144

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - LYNN RESERVOIR
COUNTY - BOX ELDER
STORET NO. - 4905

(EUTROPHIC)

WORKING PAPER NO. 843. NTIS ACCESSION NO. PB-282 343/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	**********	******	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
144.	318.	2.1	0.121	0.052	0.200	0.440

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/15/75) N	(8/ 5/75) N	(9/17/75) N
39.6	12.4			

SUMMARY OF PHYTOPLANKTON DATA

5/15/75		8/ 5/75		9/17/75	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
NAVICULA	239	MELOSIRA	386	APHANIZOMENON	7130
PHORMIDIUM	159	SCHROEDERIA	15	SYNEDRA	4045
PANDORINA	106			DIATOMA	548
CRYPTOMONAS	80			ANABAENA	548
TRACHELOMONAS	27			ASTERIONELLA	480
OTHER	132	OTHER	0	OTHER	2058
TOTAL	743	TOTAL	401	TOTAL	14809

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - MINERSVILLE RESERVOIR (EUTROPHIC)
COUNTY - BEAVER
STORET NO. - 4909

WORKING PAPER NO. 846. NTIS ACCESSION NO. PB-282 022/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1320.90	4.01	5.6	1.037	286.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
284.	550.	1.4	0.192	0.107	0.060	1.070

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)
33.6	2.9

LIMITING NUTRIENT AT SAMPLING TIME

(5/ 8/75) N (8/12/75) N (9/25/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 8/75 GENERA	COUNT	8/12/75 GENERA	COUNT	9/25/75 GENERA	COUNT
SYNURA	3728	PHORMIDIUM	3118	APHANIZOMENON	11379
STEPHANODISCUS	270	APHANIZOMENON	432	STEPHANODISCUS	646
ASTERIONELLA	90	GLOEOTRICHIA	432	TRACHELOMONAS	50
EUNOTIA	45	CHROOMONAS	192		
CRYPTOMONAS	45	CRYPTOMONAS	192		
OTHER	45	OTHER	238	OTHER	0
TOTAL	4223	TOTAL	4604	TOTAL	12075

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1020.	2435.	**********	2360.	5815.
NITROGEN	2400.	23585.	35.	15970.	41990.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	4450.	23.	1.45
NITROGEN	36375.	13.	10.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BEAVER RIVER	0.910	704.5	0.188	1.253	3.	14.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - MOON LAKE (OLIGOTROPHIC)
COUNTY - DUCHESNE
STORET NO. - 4910 WORKING PAPER NO. 847. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	290.10	3.12	14.1	3.826	140.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	17.	3.0	0.008	0.002	0.040	0.320

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
2.7	0.2	(8/11/75) P	(9/23/75) P

SUMMARY OF PHYTOPLANKTON DATA

8/11/75 GENERA	COUNT	9/23/75 GENERA	COUNT
CHROOMONAS	69	CYCLOTELLA	251
ASTERIONELLA	34	PENNATE DIATOMS	126
PENNATE DIATOMS	34	ASTERIONELLA	42
		DINOBRYON	42
OTHER	0	OTHER	0
TOTAL	137	TOTAL	461

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	1630.	1630.
NITROGEN	**********	**********	**********	145445.	145445.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1610.	1.	0.52
NITROGEN	65495.	55.	46.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LAKE FORK RIVER	3.280	202.0	0.012	1.247	6.	639.
FISH CREEK	0.177	25.9	0.014	0.760	3.	164.
BROWN DUCK CREEK	0.264	36.3	0.025	0.761	6.	175.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - NAVAJO LAKE (OLIGOTROPHIC)
COUNTY - KANE
STORET NO. - 4911 WORKING PAPER NO. 848. NTIS ACCESSION NO. PB-277 940/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	2.50	3.7	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
67.	99.	3.3	0.016	0.003	0.040	0.470

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
2.0	**********	(8/13/75) N (9/25/75) P

SUMMARY OF PHYTOPLANKTON DATA

8/13/75 GENERA	COUNT	9/25/75 GENERA	COUNT
FLAGELLATES	1204	KIRCHNERIELLA	437
KIRCHNERIELLA	262	TETRAEDRON	312
CHROOMONAS	105	COSMARIUM	156
CRYPTOMONAS	79	OOCYSTIS	156
PERIDINIUM	52	ELAKATOTHRIX	62
OTHER	104	OTHER	33
TOTAL	1806	TOTAL	1156

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - NEWCASTLE RESERVOIR (EUTROPHIC)
COUNTY - IRON
STORET NO. - 4912 WORKING PAPER NO. 849. NTIS ACCESSION NO. PB-281 874/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	0.66	7.2	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
195.	573.	1.8	0.051	0.009	0.040	0.470

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
12.5	**********	(5/ 8/75) N	(8/13/75) N	(9/26/75) P

SUMMARY OF PHYTOPLANKTON DATA

5/ 8/75 GENERA	COUNT	8/13/75 GENERA	COUNT	9/26/75 GENERA	COUNT
STEPHANODISCUS	6117	ELAKATOTHRIX	1771	ASTERIONELLA	3798
NITZSCHIA	1001	CYCLOTELLA	227	OOCYSTIS	1825
CHROOMONAS	278	OOCYSTIS	91	FRAGILARIA	831
GLENODINIUM	56	EUDORINA	45	SYNEDRA	592
SCHROEDERIA	56			APHANIZOMENON	543
OTHER	0	OTHER	0	OTHER	1043
TOTAL	7508	TOTAL	2134	TOTAL	8632

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - OTTER CREEK RESERVOIR (EUTROPHIC)
COUNTY - PIUTE
STORET NO. - 4913

WORKING PAPER NO. 850. NTIS ACCESSION NO. PB-277 939/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	984.20	10.20	6.3	1.613	1.4

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
187.	365.	1.2	0.067	0.033	0.040	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 9/75) N	(8/13/75) N	(9/25/75) N
11.8	2.5 - 4.2 (2)			

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/75 GENERA	COUNT	8/13/75 GENERA	COUNT	9/25/75 GENERA	COUNT
CYCLOTELLA	5323	FRAGILARIA	4919	CRYPTOMONAS	446
FLAGELLATES	1331	ANABAENA	642	ANABAENA	74
CHROOMONAS	1065	CERATIUM	214	CERATIUM	74
CHLAMYDOMONAS	887	MELOSIRA	214		
CRYPTOMONAS	444	CRYPTOMONAS	53		
OTHER	486	OTHER	106	OTHER	0
TOTAL	9536	TOTAL	6148	TOTAL	594

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	6415.	6415.
NITROGEN	**********	**********	**********	91475.	91475.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	4305.	33.	0.63
NITROGEN	54970.	40.	9.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
OTTER CREEK	0.352	854.7	0.121	2.265	2.	29.
EAST FORK CANAL	1.230	**********	0.123	1.369	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - PANGUITCH LAKE (EUTROPHIC)
COUNTY - GARFIELD
STORET NO. - 4914 WORKING PAPER NO. 851. NTIS ACCESSION NO. PB-281 875/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	121.70	4.99	6.4	0.748	2.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
98.	172.	1.9	0.071	0.010	0.040	1.020

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
46.0	8.6	(8/13/75) N	(9/25/75) N

SUMMARY OF PHYTOPLANKTON DATA

8/13/75 GENERA	COUNT	9/25/75 GENERA	COUNT
APHANIZOMENON	3127	APHANIZOMENON	8979
FRAGILARIA	324		
ANACYSTIS(MICROCYSTIS)	118		
SPHAEROCYSTIS	88		
CRYPTOMONAS	88		
OTHER	90	OTHER	0
TOTAL	3835	TOTAL	8979

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	20.	1795.	1815.
NITROGEN	**********	**********	695.	25160.	25855.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1350.	26.	0.36
NITROGEN	22895.	11.	5.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BLUE SPRING CREEK	0.400	41.4	0.067	0.983	20.	300.
IPSON CREEK	0.208	28.5	0.098	0.933	23.	215.
CLEAR CREEK	0.092	31.1	0.050	0.285	5.	27.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - PELICAN LAKE
COUNTY - UINTAH
STORET NO. - 4915

(EUTROPHIC)

WORKING PAPER NO. 852. NTIS ACCESSION NO. PB-277 937/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	25.90	6.88	3.0	0.126	36.8

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
282.	897.	1.6	0.044	0.004	0.050	0.920

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)
6.3	1.9

LIMITING NUTRIENT AT SAMPLING TIME

(5/13/75) N (8/ 7/75) P (9/23/75) P

SUMMARY OF PHYTOPLANKTON DATA

5/13/75 GENERA	COUNT	8/ 7/75 GENERA	COUNT	9/23/75 GENERA	COUNT
CHLAMYDOMONAS	801	TETRAEDRON	376	CHLOROPHYTAN CELLS	70495
FRAGILARIA	616	FRAGILARIA	282	ANACYSTIS(MICROCYSTIS)	2287
CHROOMONAS	493	CHROOMONAS	235	DACTYLOCOCCOPSIS	1334
CRYPTOMONAS	246	CRYPTOMONAS	188	MERISMOPEDIA	953
SCENEDESMUS	62	OOCYSTIS	141	OSCILLATORIA	667
OTHER	0	OTHER	377	OTHER	284
TOTAL	2218	TOTAL	1599	TOTAL	76020

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	915.	915.
NITROGEN	**********	**********	**********	13820.	13820.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	45.	95.	0.13
NITROGEN	700.	95.	2.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CANAL C1	0.123	**********	0.200	1.609	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - PINEVIEW RESERVOIR (EUTROPHIC)
COUNTY - WEBER
STORET NO. - 4916 WORKING PAPER NO. 853. NTIS ACCESSION NO. PB-277 936/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	802.90	10.12	13.4	6.343	248.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
110.	197.	1.6	0.028	0.006	0.300	0.740

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
5.7	0.2	(5/14/75) P	(8/ 7/75) P	(9/23/75) P

SUMMARY OF PHYTOPLANKTON DATA

5/14/75 GENERA	COUNT	8/ 7/75 GENERA	COUNT	9/23/75 GENERA	COUNT
CHROOMONAS	2552	FLAGELLATES	681	FRAGILARIA	332
CRYPTOMONAS	1411	CRYPTOMONAS	306	APHANIZOMENON	166
CHLAMYDOMONAS	489	CHROOMONAS	211	CHROOMONAS	166
SCHROEDERIA	326	CYSTS	118	CRYPTOMONAS	165
FLAGELLATES	217	SCHROEDERIA	118	STEPHANODISCUS	41
OTHER	217	OTHER	69	OTHER	0
TOTAL	5212	TOTAL	1503	TOTAL	870

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	25.	7215.	7240.
NITROGEN	**********	**********	855.	214310.	215165.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	7775.	LOSS	0.72
NITROGEN	189145.	12.	21.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
N&S BR.. S. FK. OGDEN R.	2.200	440.3	0.036	0.977	6.	154.
MIDDLE FK. OGDEN RIVER	0.589	85.5	0.020	0.650	4.	141.
GERSTEN CREEK	0.130	17.1	0.076	0.897	18.	215.
N. FK. OGDEN RIVER	1.000	160.6	0.024	1.243	5.	244.
SPRING CREEK	0.270	19.4	0.056	1.467	24.	644.
UNNAMED CANAL #1	0.066	**********	0.032	1.048	**********	**********
GROUND WATER	1.558	**********	**********	**********	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - PIUTE RESERVOIR (EUTROPHIC)
COUNTY - PIUTE
STORET NO. - 4917 WORKING PAPER NO. 854. NTIS ACCESSION NO. PB-281 880/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	6319.60	10.15	10.1	4.917	239.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
269.	394.	0.4	0.047	0.007	0.150	0.680

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
25.3	0.2	(5/ 9/75) P	(8/13/75) P	(9/24/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/75 GENERA	COUNT	8/13/75 GENERA	COUNT	9/24/75 GENERA	COUNT
DIATOMA	10007	MALLOMONAS	489	CYCLOTELLA	1635
DINOBRYON	1943	CRYPTOMONAS	383	MALLOMONAS	1372
CYCLOTELLA	426	CHROOMONAS	349	CRYPTOMONAS	739
CRYPTOMONAS	80	OOCYSTIS	70	EUGLENA	369
GYMNODINIUM	80	STAURASTRUM	70	SCHROEDERIA	369
OTHER	79	OTHER	105	OTHER	897
TOTAL	12615	TOTAL	1466	TOTAL	5381

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	20655.	20655.
NITROGEN	**********	**********	**********	273815.	273815.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	10855.	47.	2.03
NITROGEN	204370.	25.	27.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SEVIER RIVER	2.860	3185.7	0.174	1.893	5.	54.
E FORK SEVIER RIVER	1.870	2952.6	0.070	1.405	1.	28.
WEST CANAL	0.036	**********	0.061	1.245	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - PORCUPINE RESERVOIR (EUTROPHIC)
COUNTY - CACHE
STORET NO. - 4918 WORKING PAPER NO. 855. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	0.77	20.1	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
163.	238.	1.5	0.025	0.011	0.110	0.410

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
7.9	2.0	(5/14/75) P (8/ 6/75) N (9/23/75) P

SUMMARY OF PHYTOPLANKTON DATA

5/14/75 GENERA	COUNT	8/ 6/75 GENERA	COUNT	9/23/75 GENERA	COUNT
CHROOMONAS	3196	DINOBRYON	1147	CYCLOTELLA	887
DINOBRYON	761	CYCLOTELLA	688	MELOSIRA	242
CRYPTOMONAS	203	CRYPTOMONAS	191	DINOBRYON	202
		OOCYSTIS	76	ASTERIONELLA	161
		PERIDINIUM	38	CRYPTOMONAS	121
OTHER	0	OTHER	40	OTHER	121
TOTAL	4160	TOTAL	2180	TOTAL	1734

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - PRUESS LAKE
COUNTY - MILLARD
STORET NO. - 4919

(EUTROPHIC)

WORKING PAPER NO. 856. NTIS ACCESSION NO. PB-281 895/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	1.46	5.8	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
455.	949.	0.2	0.057	0.008	0.140	0.920

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
4.5	**********	(5/ 8/75) N (8/13/75) N (9/26/75) P

SUMMARY OF PHYTOPLANKTON DATA

5/ 8/75 GENERA	COUNT	8/13/75 GENERA	COUNT	9/26/75 GENERA	COUNT
DACTYLOCOCCOPSIS	2732	SCHROEDERIA	154	SCHROEDERIA	72
CHROOMONAS	102	SPHAEROCYSTIS	61	SPHAEROCYSTIS	48
		STEPHANODISCUS	31	CRYPTOMONAS	24
				APHANIZOMENON	24
				EUGLENA	24
OTHER	0	OTHER	0	OTHER	0
TOTAL	2834	TOTAL	246	TOTAL	192

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - SEVIER BRIDGE RESERVOIR (EUTROPHIC)
COUNTY - JUAB, SANPETE
STORET NO. - 4920 WORKING PAPER NO. 857. NTIS ACCESSION NO. PB-279 104/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	13260.80	44.52	6.5	5.923	1.6

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
369.	1996.	1.3	0.026	0.008	0.355	1.010

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
18.2	0.4 - 0.4 (2)	(5/12/75) P (8/12/75) P (9/24/75) P

SUMMARY OF PHYTOPLANKTON DATA

5/12/ 0		8/12/ 0		9/24/ 0	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
ELAKATOTHRIX	1191	CRUCIGENIA	2309	CYCLOTELLA	937
SYNEDRA	496	OOCYSTIS	553	NITZSCHIA	386
CHROOMONAS	347	CRYPTOMONAS	553	TETRASTRUM	331
CRYPTOMONAS	248	APHANIZOMENON	520	CRYPTOMONAS	331
DIATOMA	149	FRAGILARIA	390	SKELETONEMA	331
OTHER	100	OTHER	1400	OTHER	1268
TOTAL	2531	TOTAL	5725	TOTAL	3584

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2885.	**********	**********	30535.	33420.
NITROGEN	8275.	**********	**********	733870.	742145.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	4035.	88.	0.75
NITROGEN	258715.	65.	16.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SEVIER RIVER	5.720	12742.8	0.167	3.690	2.	52.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - STARVATION RESERVOIR (MESOTROPHIC)
COUNTY - DUCHESNE
STORET NO. - 4921 WORKING PAPER NO. 858. NTIS ACCESSION NO. PB-281 888/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	2745.40	11.17	19.9	5.834	1.8

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
290.	523.	2.7	0.016	0.004	0.040	0.320

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
5.7	**********	(5/13/75) N (8/11/75) N (9/24/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/13/75 GENERA	COUNT	8/11/75 GENERA	COUNT	9/24/75 GENERA	COUNT
STEPHANODISCUS	1179	OOCYSTIS	165	CHROOMONAS	125
FRAGILARIA	937	CHROOMONAS	110	CRYPTOMONAS	94
ASTERIONELLA	514	DINOBRYON	82	STEPHANODISCUS	63
DIATOMA	30	CRYPTOMONAS	55	ANKISTRODESMUS	63
				MALLOMONAS	31
OTHER	0	OTHER	0	OTHER	0
TOTAL	2660	TOTAL	412	TOTAL	376

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	30175.	30175.
NITROGEN	**********	**********	**********	380310.	380310.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2770.	91.	2.70
NITROGEN	87865.	77.	34.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
STRAWBERRY RIVER	4.110	2382.8	0.184	1.659	10.	89.
DUCHESNE RIVER DIVERSION	1.714	**********	0.045	1.000	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - STEINAKER RESERVOIR (MESOTROPHIC)
COUNTY - UINTAH
STORET NO. - 4922 WORKING PAPER NO. 859. NTIS ACCESSION NO. PB-281 876/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	54.40	3.32	14.0	0.804	2.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
100.	238.	4.7	0.011	0.005	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/13/75) N	(8/ 7/75) P	(9/22/75) N
1.8	••••••••••			

SUMMARY OF PHYTOPLANKTON DATA

5/13/75 GENERA	COUNT	8/ 7/75 GENERA	COUNT	9/22/75 GENERA	COUNT
CHROOMONAS	533	APHANOCAPSA	253	APHANOCAPSA	201
CRYPTOMONAS	267	CHROOMONAS	95	CHROOMONAS	134
ANKISTRODESMUS	200	SCHROEDERIA	32	ASTERIONELLA	34
CYCLOTELLA	33				
OTHER	0	OTHER	0	OTHER	0
TOTAL	1033	TOTAL	380	TOTAL	369

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	••••••••••	••••••••••	••••••••••	365.	365.
NITROGEN	••••••••••	••••••••••	••••••••••	18235.	18235.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	460.	LOSS	0.11
NITROGEN	18100.	0.	5.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
STEINAKER FEEDER CANAL	0.754	••••••••••	0.012	0.585	••••••••••	••••••••••
STEINAKER DITCH	0.010	••••••••••	0.020	0.343	••••••••••	••••••••••
STEINAKER DRAW	0.013	17.1	••••••••••	••••••••••	0.3*	12.*
SPRING CREEK	0.013	16.6	••••••••••	••••••••••	0.3*	12.*

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - TROPIC RESERVOIR (MESOTROPHIC)
COUNTY - GARFIELD
STORET NO. - 4923 WORKING PAPER NO. 860. NTIS ACCESSION NO. PB-281 012/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	217.60	0.73	3.0	0.463	56.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
170.	218.	1.9	0.021	0.006	0.050	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.2	0.2	(5/ 8/75) P	(9/25/75) N	(8/14/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 8/75 GENERA	COUNT	8/14/75 GENERA	COUNT	9/25/75 GENERA	COUNT
OSCILLATORIA	14	GLOEOTRICHIA	4660	CHROOMONAS	80
		CHROOMONAS	98	CRYPTOMONAS	40
		ANABAENA	65	PEDIASTRUM	20
		STAURASTRUM	33		
OTHER	0	OTHER	0	OTHER	0
TOTAL	14	TOTAL	4856	TOTAL	140

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	295.	295.
NITROGEN	**********	**********	**********	8940.	8940.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	260.	12.	0.40
NITROGEN	10810.	LOSS	12.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
EAST FORK SEVIER RIVER	0.440	191.7	0.023	0.392	1.	40.
BADGER CREEK	0.007	14.0	0.016	0.566	0.4	11.
KING CREEK	0.005	5.4	0.014	0.923	0.9*	26.*

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - UTAH LAKE
COUNTY - UTAH
STORET NO. - 4924

(HYPEREUTROPHIC)

WORKING PAPER NO. 861. NTIS ACCESSION NO. PB-277 932/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	6876.40	396.60	2.1	17.180	2.5

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
166.	1118.	0.2	0.132	0.012	0.320	1.160

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
72.0	6.7 - 13.8 (2)	(5/12/75) P AND N (8/ 8/75) N (9/19/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

5/12/75 GENERA	COUNT	8/ 8/75 GENERA	COUNT	9/19/75 GENERA	COUNT
CHROOMONAS	1618	ANARAENA	9639	ANABAENA	6854
CRYPTOMONAS	917	MELOSIRA	455	OSCILLATORIA	219
SCHROEDERIA	890	OSCILLATORIA	342	CRYPTOMONAS	165
EUGLENA	405	CHROOMONAS	304	GLENODINIUM	137
PTEROMONAS	216	CRYPTOMONAS	152	SCENEDESMUS	82
OTHER	998	OTHER	151	OTHER	275
TOTAL	5044	TOTAL	11043	TOTAL	7732

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	125700.	7645.	**********	68550.	201895.
NITROGEN	523420.	460570.	**********	1333575.	2317565.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	139995.	31.	0.51
NITROGEN	817185.	65.	5.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BENJAMIN SLOUGH	1.320	326.3	0.339	2.888	22.	297.
UNNAMED CANAL E1	0.132	12.4	0.191	2.218	64.	745.
SPANISH FORK	2.075	1813.0	0.171	1.362	6.	49.
DRY CREEK	0.420	98.4	0.745	5.690	15.*	350.*
HOBBLE CREEK	0.617	297.8	0.054	1.529	4.	100.
SPRING CREEK K1	0.250	24.1	1.607	6.125	38.*	851.*
MILL RACE CREEK	1.240	44.0	1.354	5.773	303.	779.
PROVO RIVER	5.296	1787.1	0.053	0.936	3.	74.
UNNAMED STREAM N1	0.330	3.4	1.727	4.796	351.*	7962.*
UNNAMED STREAM P1	0.970	24.6	0.064	1.467	143.*	3234.*
AMEHICAN FORK CREEK	0.038	163.2	0.024	1.462	0.2	11.
PLEASANT GROVE WST DITCH	0.750	98.4	0.329	3.362	23.	540.
UNNAMED STREAM Y1	0.111	3.6	0.113	3.475	110.	3379.

SPRING CREEK 41	0.520	18.1	0.045	1.958	104.*	2357.*
UNNAMED STREAM 51	0.023	1.0	0.115	2.601	85.	1885.
UNNAMED STREAM 61	0.010	1.8	0.204	2.980	36.	522.
UNNAMED STREAM 71	0.210	1.0	0.031	2.329	205.	15425.
CURRENT CREEK 81	0.298	999.7	0.088	1.514	0.8	14.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
MILL RACE CREEK L2	0.073	1.234
SOUTH FORK	0.026	0.476
CURRENT CREEK (82)	0.042	1.331

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN UTAH

NAME - WILLARD RESERVOIR (EUTROPHIC)
COUNTY - BOX ELDER
STORET NO. - 4925 WORKING PAPER NO. 862. NTIS ACCESSION NO. PB-279 254/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	62.20	40.47	5.9	2.570	3.3

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
171.	989.	1.1	0.044	0.009	0.060	0.620

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/14/75) N	(8/ 6/75) N	(9/23/75) N
7.6	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/14/ 0 GENERA	COUNT	8/ 6/ 0 GENERA	COUNT	9/23/ 0 GENERA	COUNT
ANKISTRODESMUS	2412	MELOSIRA	2987	APHANIZOMENON	1104
CRYPTOMONAS	36	FRAGILARIA	1873	CRYPTOMONAS	28
		CRYPTOMONAS	253		
		OOCYSTIS	202		
		ANKISTRODESMUS	202		
OTHER	0	OTHER	51	OTHER	0
TOTAL	2448	TOTAL	5568	TOTAL	1132

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	110.	**********	**********	8250.	8360.
NITROGEN	1485.	**********	**********	210285.	211770.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	7380.	12.	0.21
NITROGEN	124710.	41.	5.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WILLARD CANAL	2.250	**********	0.101	2.132	**********	**********
UNNAMED STREAM B1	0.184	12.6	0.056	1.294	26.	596.
UNNAMED STREAM C1	0.020	2.3	0.047	2.061	13.	565.
UNNAMED STREAM D1	0.011	0.3	0.024	1.786	33.	2067.
UNNAMED STREAM E1	0.006	1.6	0.020	2.191	3.	259.
UNNAMED STREAM F1	0.042	4.9	0.020	2.881	5.	779.
UNNAMED STREAM G1	0.057	**********	0.050	1.748	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - AMERICAN LAKE
COUNTY - PIERCE
STORET NO. - 5301

(MESOTROPHIC)

WORKING PAPER NO. 864. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	65.80	4.70	15.4	0.160	38.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
41.	69.	4.0	0.027	0.007	0.105	0.450

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
4.8	0.7 - 5.3 (2)	(4/ 1/75) P (7/17/75) N (10/29/75) N

SUMMARY OF PHYTOPLANKTON DATA

GENERA	4/ 1/75 COUNT	GENERA	7/17/75 COUNT	GENERA	10/29/75 COUNT
FRAGILARIA	435	CYCLOTELLA	529	APHANOCAPSA	555
CHROOMONAS	373	CHROOMONAS	511	FRAGILARIA	321
MELOSIRA	373	MELOSIRA	91	CHROOMONAS	263
CRYPTOMONAS	155	OOCYSTIS	73	ASTERIONELLA	175
STEPHANODISCUS	93	ANKISTRODESMUS	55	CRYPTOMONAS	117
OTHER	124	OTHER	220	OTHER	351
TOTAL	1553	TOTAL	1479	TOTAL	1782

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	35.	445.	480.
NITROGEN	**********	**********	1330.	12835.	14165.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION
PHOSPHORUS	**********	*****
NITROGEN	**********	*****

LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
0.10
3.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MURRAY CREEK	0.160	28.2	0.026	0.558	6.	127.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - BANKS LAKE
COUNTY - GRANT, DOUGLAS
STORET NO. - 5302

(MESOTROPHIC)

WORKING PAPER NO. 865, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	**********	100.77	12.4	**********	175.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
60.	120.	3.4	0.021	0.007	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
7.4	0.2 - 0.7 (4)	(4/ 3/75) N (7/22/75) N (9/10/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

4/ 3/75 GENERA	COUNT	7/22/75 GENERA	COUNT	9/10/75 GENERA	COUNT
ASTERIONELLA	3034	MELOSIRA	690	ASTERIONELLA	624
TABELLARIA	358	ASTERIONELLA	248	TABELLARIA	451
LYNGBYA	167	ANABAENA	221	FRAGILARIA	416
DINOBRYON	119	ANKISTRODESMUS	55	CHROOMONAS	243
CHROOMONAS	96	CHROOMONAS	55	APHANIZOMENON	173
OTHER	168	OTHER	111	OTHER	348
TOTAL	3942	TOTAL	1380	TOTAL	2255

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
PAYNES GULCH	0.259	5.734
NORTHRUP CREEK	0.196	2.219
FEEDER CANAL	0.039	0.406
RUSHO CREEK	1.120	8.019

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - LAKE CHELAN (OLIGOTROPHIC)
COUNTY - CHELAN
STORET NO. - 5303 WORKING PAPER NO. 866. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	2393.00	133.90	******	61.940	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
21.	37.	9.9	0.005	0.003	0.070	0.250

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
0.9	0.3 - 0.4 (2)	(4/ 2/75) P (7/21/75) N (9/11/75) P

SUMMARY OF PHYTOPLANKTON DATA

4/ 2/75 GENERA	COUNT	7/21/75 GENERA	COUNT	9/11/75 GENERA	COUNT
ASTERIONELLA	374	TABELLARIA	262	TABELLARIA	122
TABELLARIA	166	ASTERIONELLA	105		
CYCLOTELLA	146	CHLOROPHYTAN COLONIES	79		
CYMBELLA	21	APHANOTHECE	26		
OOCYSTIS	21				
OTHER	0	OTHER	0	OTHER	0
TOTAL	728	TOTAL	472	TOTAL	122

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	455.	**********	145.	34095.	34695.
NITROGEN	1360.	**********	5390.	1320505.	1327255.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	24225.	30.	0.26
NITROGEN	303320.	77.	9.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
STEHEKIN RIVER	40.470	891.0	0.014	0.635	20.	910.
RAILROAD CREEK	5.780	172.0	0.011	0.553	12.	586.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
STINK CREEK	0.045	1.129
POISON CREEK	0.020	0.248
TWENTY FIVE MILE CREEK	0.014	0.276
GRADE CREEK	0.020	0.130
PRINCE CREEK	0.011	0.360
MITCHELL CREEK	0.026	0.720

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - DIAMOND LAKE (EUTROPHIC)
COUNTY - PEND OREILLE
STORET NO. - 5304 WORKING PAPER NO. 867. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	3.07	8.1	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
38.	53.	5.0	0.014	0.010	0.060	0.530

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME			
		(6/ 4/75) N	(7/23/75) N	(9/16/75) P	(10/24/75) P
14.5	0.4				

SUMMARY OF PHYTOPLANKTON DATA

6/ 4/75 GENERA	COUNT	7/23/75 GENERA	COUNT	9/16/75 GENERA	COUNT
DINOBRYON	306	PHORMIDIUM	969	CHROOCOCCUS	366
CYCLOTELLA	167	GLOEOCAPSA	588		
OOCYSTIS	56	ANABAENA	554	CYCLOTELLA	284
CHROOMONAS	56	EUNOTIA	554	EUNOTIA	244
CRYPTOMONAS	28	COSMARIUM	242	NAVICULA	244
OTHER	83	OTHER	2147	OTHER	2440
TOTAL	696	TOTAL	5054	TOTAL	3578

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
MOON CREEK (OUTLET)	0.030	0.855

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - GREEN LAKE (EUTROPHIC)
COUNTY - KING
STORET NO. - 5305 WORKING PAPER NO. 868. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	1.04	3.8	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
22.	33.	2.2	0.027	0.009	0.050	0.360

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
3.0	0.8 - 2.9 (2)	(4/ 1/75) N (7/18/75) N (10/29/75) P

SUMMARY OF PHYTOPLANKTON DATA

4/ 1/75 GENERA	COUNT	7/18/75 GENERA	COUNT	10/29/75 GENERA	COUNT
ASTERIONELLA	3960	ANACYSTIS(MICROCYSTIS)	341	ASTERIONELLA	676
APHANIZOMENON	2487	OSCILLATORIA	341	CHRYSOPHYTAN CELLS	204
FRAGILARIA	1301	CYCLOTELLA	189	ANABAENA	157
FLAGELLATES	287	CHROOMONAS	114	FRAGILARIA	157
CENTRIC DIATOM	57	CLOSTERIUM	38	APHANIZOMENON	94
OTHER	192	OTHER	37	OTHER	158
TOTAL	8284	TOTAL	1060	TOTAL	1446

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - KEECHELUS LAKE (OLIGOTROPHIC)
COUNTY - KITTITAS
STORET NO. - 5306 WORKING PAPER NO. 869. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	141.70	10.36	18.7	10.200	220.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
15.	24.	5.6	0.007	0.002	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
1.4	0.2 - 0.3 (3)	(7/21/75) P AND N (9/12/75) P (10/28/75) P

SUMMARY OF PHYTOPLANKTON DATA

7/21/75 GENERA	COUNT	9/12/75 GENERA	COUNT	10/28/75 GENERA	COUNT
CYCLOTELLA	466	CHLOROPHYTAN CELLS	195	CHROOMONAS	24
CHROOMONAS	89	DINOBRYON	195	DINOBRYON	24
MELOSIRA	89	MELOSIRA	130		
CRYPTOMONAS	22	CRYPTOMONAS	22		
OTHER	0	OTHER	0	OTHER	0
TOTAL	666	TOTAL	542	TOTAL	48

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	4525.	4525.
NITROGEN	**********	**********	**********	95980.	95980.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1685.	63.	0.44
NITROGEN	40835.	57.	9.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MEADOW CREEK	1.470	20.4	0.008	0.159	38.	404.
GOLD CREEK	2.610	36.3	0.007	0.196	28.	835.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
ROARING CREEK	0.007	0.248
COLD CREEK	0.007	0.265

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - MAYFIELD LAKE (MESOTROPHIC)
COUNTY - LEWIS
STORET NO. - 5307 WORKING PAPER NO. 870. NTIS ACCESSION NO. PB- /AS

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	3626.00	8.90	17.6	188.350	9.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
24.	30.	2.5	0.014	0.007	0.100	0.280

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
4.2	0.1 - 0.2 (2)	(3/28/75) P AND N (7/17/75) N (10/30/75) P

SUMMARY OF PHYTOPLANKTON DATA

3/28/75 GENERA	COUNT	7/17/75 GENERA	COUNT	10/30/75 GENERA	COUNT
MELOSIRA	247	ASTERIONELLA	1223	ASTERIONELLA	145
CRYPTOMONAS	81	TABELLARIA	100	CHROOMONAS	29
CHROOMONAS	27	CRYPTOMONAS	25		
PENNATE DIATOMS	27				
OTHER	0	OTHER	0	OTHER	0
TOTAL	432	TOTAL	1348	TOTAL	174

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	935.	**********	10.	100135.	101080.
NITROGEN	4105.	**********	320.	1590505.	1594930.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	102690.	LOSS	11.36
NITROGEN	1548220.	3.	179.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
COWLITZ RIVER	165.000	2988.4	0.015	0.224	26.	383.
KLICKITAT CREEK	0.850	26.9	0.053	1.448	24.	1249.
TILTON RIVER	23.480	365.2	0.025	0.405	46.	856.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
SILVER CREEK	0.032	0.496
WINSTON CREEK	0.018	0.750

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COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - MEDICAL LAKE (HYPEREUTROPHIC)
COUNTY - SPOKANE
STORET NO. - 5308 WORKING PAPER NO. 871. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	0.64	9.7	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
1380.	1479.	2.5	0.275	0.166	0.225	2.900

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME			
16.4	9.0 - 30.5 (3)	(6/ 3/75) N	(7/23/75) N	(9/11/75) N	(10/24/75) N

SUMMARY OF PHYTOPLANKTON DATA

6/ 3/75 GENERA	COUNT	7/23/75 GENERA	COUNT	9/11/75 GENERA	COUNT	10/24/75 GENERA	COUNT
CHROOMONAS	769	NITZSCHIA	2267	ANACYSTIS(MICROCYSTIS)	1560	FRAGILARIA	2032
SCHROEDERIA	678	ANACYSTIS(MICROCYSTIS)	599	PHORMIDIUM	1147	ANABAENA	290
PHORMIDIUM	271	CRYPTOMONAS	385	FRAGILARIA	551	ANACYSTIS(MICROCYSTIS)	145
CRYPTOMONAS	226	CHROOMONAS	342	CRYPTOMONAS	229		
		APHANOCAPSA	257	PENNATE DIATOMS	229		
OTHER	0	OTHER	384	OTHER	277	OTHER	0
TOTAL	1944	TOTAL	4234	TOTAL	3993	TOTAL	2467

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - MOSES LAKE (EUTROPHIC)
COUNTY - GRANT
STORET NO. - 5309 WORKING PAPER NO. 872. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	7990.10	27.58	5.9	4.560	289.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
183.	377.	0.9	0.115	0.038	0.150	1.040

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
29.1	7.7 - 14.8 (4)	(4/ 2/75) P AND N (7/21/75) N (9/10/75) N

SUMMARY OF PHYTOPLANKTON DATA

4/ 2/75 GENERA	COUNT	7/21/75 GENERA	COUNT	9/10/75 GENERA	COUNT
STEPHANODISCUS	37485	APHANIZOMENON	5406	APHANIZOMENON	7171
SCENEDESMUS	813	OOCYSTIS	2806	OOCYSTIS	850
CRYPTOMONAS	642	SCENEDESMUS	1471	CRYPTOMONAS	702
CHROOMONAS	428	MELOSIRA	753	MELOSIRA	481
MELOSIRA	342	CHROOMONAS	479	OSCILLATORIA	444
OTHER	1241	OTHER	1472	OTHER	923
TOTAL	40951	TOTAL	12387	TOTAL	10571

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	9905.	**********	20.	21220.	31145.
NITROGEN	21210.	**********	780.	335925.	357915.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	17230.	45.	1.13
NITROGEN	206055.	42.	13.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CRAB CREEK	2.010	5770.5	0.099	1.734	0.8	16.
ROCKY COULEE WASTEWAY	********	764.0	0.122	1.904	5.	79.
ROCKY FORD CREEK	2.550	1217.3	0.139	1.752	9.	112.

NAME - OZETTE LAKE
COUNTY - CLALLAM
STORET NO. - 5310

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

(OLIGO-MESOTROPHIC)

WORKING PAPER NO. 873. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	29.54	39.6	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	29.	2.5	0.010	0.009	0.110	0.290

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)
1.2	0.1

LIMITING NUTRIENT AT SAMPLING TIME

(3/31/75) N (7/18/75) N (10/29/75) P

SUMMARY OF PHYTOPLANKTON DATA

3/31/75 GENERA	COUNT	7/18/75 GENERA	COUNT	10/29/75 GENERA	COUNT
CHROOMONAS	120	MELOSIRA	719	STEPHANODISCUS	66
CYCLOTELLA	60	FLAGELLATES	332	CHROOMONAS	66
MELOSIRA	60	PENNATE DIATOMS	166	SYNEDRA	22
CRYPTOMONAS	30	CRYPTOMONAS	111	CLOSTERIUM	22
OTHER	0	ANKISTRODESMUS	111	OSCILLATORIA	22
		OTHER	165	OTHER	24
TOTAL	270	TOTAL	1604	TOTAL	222

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION
PHOSPHORUS	**********	*****
NITROGEN	**********	*****

LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
****
****

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
OZETTE RIVER	0.015	0.344
UMBRELLA CREEK	0.015	0.236
BIG RIVER	0.022	0.433
CHOOKED CREEK	0.015	0.282
THOUT CREEK	0.041	0.456

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - SAMMAMISH LAKE (MESO-EUTROPHIC)
COUNTY - KING
STORET NO. - 5311 WORKING PAPER NO. 874. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	253.00	19.82	17.7	6.410	1.8

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
39.	81.	3.2	0.015	0.006	0.210	0.540

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.3	0.5 - 1.6 (2)	(3/31/75) P	(7/17/75) P	(10/28/75) P

SUMMARY OF PHYTOPLANKTON DATA

3/31/75 GENERA	COUNT	7/17/75 GENERA	COUNT	10/28/75 GENERA	COUNT
MELOSIRA	5024	APHANOCAPSA	1081	APHANOCAPSA	683
FRAGILARIA	1136	APHANOTHECE	765	FRAGILARIA	683
STEPHANODISCUS	723	CHROOMONAS	90	CHROOMONAS	528
ASTERIONELLA	551	ROTHYOCOCCUS	45	CRYPTOMONAS	186
SYNEDRA	344	CHLOROPHYTAN COLONIES	45	APHANIZOMENON	31
OTHER	344	OTHER	135	OTHER	63
TOTAL	8122	TOTAL	2161	TOTAL	2174

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	110.	6020.	6130.
NITROGEN	**********	**********	4165.	336010.	340175.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	4450.	27.	0.31
NITROGEN	129275.	62.	17.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ISSAQUAH CREEK	4.140	141.7	0.036	1.309	33.	1259.
TIBBETTS CREEK	0.250	13.0	0.023	1.907	11.	1441.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
UNNAMED CREEK A1	0.025	1.686
UNNAMED CANAL C1	0.065	0.735

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - LAKE WHATCOM (MESOTROPHIC)
COUNTY - WHATCOM
STORET NO. - 5312 WORKING PAPER NO. 875. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	145.30	20.25	1.8	4.770	95.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
17.	39.	5.4	0.009	0.009	0.320	0.510

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
3.4	0.3 - 0.4 (2)	(3/31/75) P	(7/18/75) P	(10/29/75) P

SUMMARY OF PHYTOPLANKTON DATA

3/31/75 GENERA	COUNT	7/18/75 GENERA	COUNT	10/29/75 GENERA	COUNT
MELOSIRA	735	TABELLARIA	733	ASTERIONELLA	184
ASTERIONELLA	331	SYNEDRA	193	FRAGILARIA	184
CHROOMONAS	257	CYCLOTELLA	38	SPONDYLOSIUM	184
STEPHANODISCUS	184	MALLOMONAS	38	CHROOMONAS	147
TABELLARIA	110			APHANOCAPSA	73
OTHER	0	OTHER	0	OTHER	109
TOTAL	1617	TOTAL	1002	TOTAL	881

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	75.	2515.	2590.
NITROGEN	**********	**********	2785.	164600.	167385.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1480.	43.	0.13
NITROGEN	89620.	46.	8.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
OLSEN CREEK	0.300	9.8	0.019	0.787	17.	1112.
BEAVER CREEK	0.540	20.0	0.022	0.838	18.	1270.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WASHINGTON

NAME - LOWER GRANITE RESERVOIR (EUTROPHIC)
COUNTY - GARFIELD, WHITMAN
STORET NO. - 5313 WORKING PAPER NO. 876, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	36.42	13.7	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
59.	140.	1.6	0.033	0.022	0.150	0.330

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
4.9	1.1 - 3.9 (4)	(7/23/75) N	(9/12/75) N

SUMMARY OF PHYTOPLANKTON DATA

7/23/75 GENERA	COUNT	9/12/75 GENERA	COUNT
SKELETONEMA	630	MELOSIRA	810
CENTRIC DIATOM	540	CHROOMONAS	778
FRAGILARIA	210	SKELETONEMA	195
CHROOMONAS	60	CYCLOTELLA	162
NITZSCHIA	60	NITZSCHIA	130
OTHER	150	OTHER	812
TOTAL	1650	TOTAL	2887

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - BIG SANDY RESERVOIR (EUTROPHIC)
COUNTY - SUBLETTE, SWEETWATER
STORET NO. - 5601 WORKING PAPER NO. 881. NTIS ACCESSION NO. PB-276 825/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1139.60	8.34	5.8	2.462	273.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
41.	98.	0.3	0.087	0.020	0.060	0.430

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/19/75) N	(9/ 2/75) N	(10/16/75) N
4.4	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/19/75 GENERA	COUNT	9/ 2/75 GENERA	COUNT	10/16/75 GENERA	COUNT
CENTRIC DIATOM	568	APHANIZOMENON	577	CHROOMONAS	1050
CHROOMONAS	512	CHROOMONAS	241	CRYPTOMONAS	131
CRYPTOMONAS	57	CRYPTOMONAS	120	SCHROEDERIA	98
SURIRELLA	28	SCHROEDERIA	48		
NITZSCHIA	28				
OTHER	0	OTHER	0	OTHER	0
TOTAL	1193	TOTAL	986	TOTAL	1279

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	9980.	9980.
NITROGEN	**********	**********	**********	133855.	133855.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	8485.	15.	1.20
NITROGEN	99505.	26.	16.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BIG SANDY RIVER	2.450	834.0	0.114	1.131	9.	110.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - BOULDER LAKE (OLIGOTROPHIC)
COUNTY - SUBLETTE
STORET NO. - 5602 WORKING PAPER NO. 882. NTIS ACCESSION NO. PB-277 049/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	336.70	7.03	12.2	5.724	181.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
16.	3.	3.5	0.008	0.002	0.040	0.235

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
2.5	**********	(8/28/75) N	(10/17/75) P

SUMMARY OF PHYTOPLANKTON DATA

8/28/75 GENERA	COUNT	10/17/75 GENERA	COUNT
CHLAMYDOMONAS	3806	SPHAEROCYSTIS	104
CHROOMONAS	327	APHANOTHECE	78
CRYPTOMONAS	59	ELAKATOTHRIX	52
SPHAEROCYSTIS	30	CRYPTOMONAS	26
		CHROOMONAS	26
OTHER	0	OTHER	0
TOTAL	4222	TOTAL	286

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	4800.	4805.
NITROGEN	**********	**********	90.	137030.	137120.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3105.	35.	0.68
NITROGEN	176470.	LOSS	19.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BOULDER CREEK	5.180	297.8	0.022	0.676	12.	371.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
UNNAMED CREEK #1	0.063	1.108

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - BOYSEN RESERVOIR (EUTROPHIC)
COUNTY - FREMONT
STORET NO. - 5603 WORKING PAPER NO. 883. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	19945.60	89.84	10.4	45.717	270.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
129.	454.	0.9	0.037	0.014	0.140	0.340

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
6.3	**********	(5/19/75) P AND N (9/ 2/75) P AND N (10/17/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/19/75 GENERA	COUNT	9/ 2/75 GENERA	COUNT	10/17/75 GENERA	COUNT
FRAGILARIA	2777	APHANIZOMENON	1129	CHROOMONAS	350
ASTERIONELLA	2529	CHROOMONAS	635	NAVICULA	225
CHROOMONAS	397	CRYPTOMONAS	212	APHANIZOMENON	125
CENTRIC DIATOM	248	ANABAENA	71	CRYPTOMONAS	75
CRYPTOMONAS	124	DINOBRYON	47	SYNEDRA	50
OTHER	100	OTHER	93	OTHER	100
TOTAL	6175	TOTAL	2187	TOTAL	925

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	18750.	**********	**********	301270.	320020.
NITROGEN	64780.	**********	**********	2573715.	2638495.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	30360.	91.	3.56
NITROGEN	1277070.	52.	29.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WIND RIVER	39.900	11370.1	0.180	1.188	22.	137.
BADWATER CREEK	0.650	2092.7	0.630	1.749	3.	14.
DITCH (D1)	0.040	**********	0.060	0.597	**********	**********
DITCH (E1)	0.059	**********	0.054	1.351	**********	**********
FIVEMILE CREEK	4.200	1082.6	0.151	3.590	23.	450.
MUDDY CREEK	0.531	859.9	0.212	1.440	2.	27.
WYOMING CANAL	0.119	**********	0.087	0.899	**********	**********
COTTONWOOD CREEK	0.055	427.3	0.118	1.351	4.	57.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
POISON CREEK	0.617	2.251

BIRDSEYE CREEK	0.037	1.611

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - LAKE DE SMET (MESO-EUTROPHIC)
COUNTY - JOHNSON
STORET NO. - 5604 WORKING PAPER NO. 884. NTIS ACCESSION NO. PB-277 050/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	25.90	10.74	12.8	0.167	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
167.	629.	2.3	0.033	0.006	0.040	0.620

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/22/75) N	(8/29/75) N	(10/15/75) N
11.2	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/22/75 GENERA	COUNT	8/29/75 GENERA	COUNT	10/15/75 GENERA	COUNT
CENTRIC DIATOM	5052	MELOSIRA	1749	APHANIZOMENON	2338
FRAGILARIA	1160	FLAGELLATES	875	CHROOMONAS	984
DIATOMA	414	APHANIZOMENON	807	CRYPTOMONAS	287
STEPHANODISCUS	373	ANABAENA	673	ANABAENA	123
FLAGELLATES	124	ANACYSTIS(MICROCYSTIS)	673	SPHAEROCYSTIS	41
OTHER	165	OTHER	807	OTHER	0
TOTAL	7288	TOTAL	5584	TOTAL	3773

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	770.	775.
NITROGEN	**********	**********	215.	18075.	18290.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1030.	LOSS	0.07
NITROGEN	11835.	35.	1.7

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
LITTLE PINEY CREEK DIV.	0.025	0.680
SHELL CREEK	0.110	1.230

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - FLAMING GORGE RESERVOIR (MESOTROPHIC--EUTROPHIC)
COUNTY - SWEETWATER, WY; DAGGETT, UT
STORET NO. - 5605 WORKING PAPER NO. 885. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	39109.00	137.67	33.9	66.182	2.3

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
160.	514.	3.4	0.014	0.003	0.605	0.900

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
5.6	0.2 - 0.4 (5)	(5/15/75) P AND N (8/ 7/75) P (9/22/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

5/15/75 GENERA	COUNT	8/ 7/75 GENERA	COUNT	9/22/75 GENERA	COUNT
STEPHANODISCUS	1981	CHROOMONAS	1331	APHANIZOMENON	1086
FRAGILARIA	775	APHANIZOMENON	951	CRYPTOMONAS	827
DIATOMA	258	FRAGILARIA	428	CHROOMONAS	465
CHROOMONAS	258	CRYPTOMONAS	333	OSCILLATORIA	103
NAVICULA	43	MELOSIRA	190		
OTHER	0	OTHER	428	OTHER	0
TOTAL	3315	TOTAL	3661	TOTAL	2481

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	40405.	**********	**********	145835.	186240.
NITROGEN	95255.	**********	**********	2731180.	2826435.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	24365.	87.	1.35
NITROGEN	2583495.	LOSS	20.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
GREEN RIVER	48.400	25900.0	0.060	1.027	2.	58.
CANT CREEK	0.402	72.5	0.023	0.602	4.	100.
W FORK EAGLE CREEK	0.088	8.0	0.018	0.792	6.	286.
UPPER MARSH CREEK	0.076	116.5	0.092	1.590	2.	34.
BIRCH SPRING DRAW	0.128	62.2	0.086	20.570	4.*	131.*
HENRYS FORK	2.360	1346.8	0.062	0.918	4.	52.
BLACKS FORK	10.500	8029.0	0.124	1.308	9.	68.
SAGE CREEK	0.280	303.0	0.166	2.659	5.	104.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
CURRANT CREEK	0.047	1.568

Reproduced from best available copy.

MIDDLE MARSH CREEK	0.081	1.528
SPRING CREEK	0.958	-2.462
UNNAMED CREEK (M1)	0.018	0.843

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - FREMONT LAKE
COUNTY - SUBLETTE
STORET NO. - 5606

(OLIGOTROPHIC)

WORKING PAPER NO. 886. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	295.30	20.23	24.4	6.300	2.5

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
14.	1.	13.3	0.006	0.002	0.040	0.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
3.8	**********	(8/28/75) P (10/17/75) P

SUMMARY OF PHYTOPLANKTON DATA

GENERA	8/28/75 COUNT	GENERA	10/17/75 COUNT
CHLAMYDOMONAS	3336	CHLAMYDOMONAS	3181
ASTERIONELLA	128	ASTERIONELLA	468
TABELLARIA	86	CHRYSOPHYTAN FLAGELLATES	281
RHIZOSOLENIA	43	TABELLARIA	140
DINOBRYON	43	CHROOMONAS	94
OTHER	0	OTHER	0
TOTAL	3636	TOTAL	4164

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	15.	2345.	2360.
NITROGEN	**********	**********	570.	224065.	224635.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1870.	21.	0.12
NITROGEN	29169.	87.	11.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PINE CREEK	5.040	190.0	0.009	0.841	7.	739.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
FALSE CREEK	0.011	0.380

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - GLENDO RESERVOIR (EUTROPHIC)
COUNTY - CONVERSE, PLATTE
STORET NO. - 5607 WORKING PAPER NO. 887, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	50523.10	53.97	18.3	47.113	264.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
148.	525.	1.0	0.045	0.014	0.315	0.695

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/22/75) P	(8/27/75) P	(10/14/75) P
8.5	0.6 - 5.3 (3)			

SUMMARY OF PHYTOPLANKTON DATA

5/22/75 GENERA	COUNT	8/27/75 GENERA	COUNT	10/14/75 GENERA	COUNT
DIATOMA	645	APHANIZOMENON	2407	NAVICULA	440
STEPHANODISCUS	469	NAVICULA	193	MELOSIRA	439
CRYPTOMONAS	293	DIATOMA	48	DIATOMA	275
ASTERIONELLA	176	RHOICOSPHENIA	48	CHROOMONAS	275
NAVICULA	59	SCENEDESMUS	48	STEPHANODISCUS	165
OTHER	116	OTHER	0	OTHER	163
TOTAL	1758	TOTAL	2744	TOTAL	1757

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2680.	**********	5.	172270.	174955.
NITROGEN	8920.	**********	105.	2243640.	2252665.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	49205.	72.	3.24
NITROGEN	1742630.	23.	41.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NORTH PLATTE RIVER	47.060	48813.7	0.117	1.476	4.	45.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
WHISKEY GULCH	0.837	4.717
ELKHORN CREEK	0.010	0.298
COTTONWOOD CREEK	0.150	1.231
MUDDY CREEK	0.068	1.772
WILLOW CREEK	0.084	1.903

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - KEYHOLE RESERVOIR (EUTROPHIC)
COUNTY - CROOK
STORET NO. - 5608 WORKING PAPER NO. 888. NTIS ACCESSION NO. PB-277 051/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	5180.00	38.02	6.5	0.826	15.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
170.	668.	1.1	0.028	0.004	0.050	0.620

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/23/75) N	(8/29/75) P	(10/15/75) N
7.8	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/23/75 GENERA	COUNT	8/29/75 GENERA	COUNT	10/15/75 GENERA	COUNT
ASTERIONELLA	858	APHANIZOMENON	452	APHANIZOMENON	1356
CRYPTOMONAS	775	CHROOMONAS	278	CHROOMONAS	765
CHROOMONAS	719	CRYPTOMONAS	243	OOCYSTIS	417
ANKISTRODESMUS	83	GOMPHOSPHAERIA	139	CRYPTOMONAS	348
STEPHANODISCUS	55	CLOSTERIUM	35	STEPHANODISCUS	104
OTHER	28	OTHER	35	OTHER	70
TOTAL	2518	TOTAL	1182	TOTAL	3060

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1270.	**********	**********	16330.	17600.
NITROGEN	1590.	**********	70.	112735.	114395.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	210.	99.	0.46
NITROGEN	16840.	85.	3.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BELLE FOURCHE RIVER	0.596	4325.3	0.518	2.872	2.	12.
WIND CREEK	0.136	240.9	1.217	2.948	22.	52.
MULE CREEK	0.021	33.7	0.358	1.892	7.	37.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
MILLER CREEK	0.284	1.736

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - OCEAN LAKE (EUTROPHIC)
COUNTY - FREMONT
STORET NO. - 5609 WORKING PAPER NO. 889, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	24.68	4.2	1.205	4.4

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
200.	1400.	0.5	0.043	0.004	0.040	0.820

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.5	**********	(5/19/75) N	(9/ 2/75) P	(10/16/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/19/75 GENERA	COUNT	9/ 2/75 GENERA	COUNT	10/16/75 GENERA	COUNT
CRYPTOMONAS	981	OOCYSTIS	609	CHLOROPHYTAN FILAMENTS	1891
TABELLARIA	235	CRYPTOMONAS	578	ASTERIONELLA	1833
NITZSCHIA	157	APHANIZOMENON	183	CRYPTOMONAS	1251
SCHROEDERIA	118	SCENEDESMUS	91	CHROOMONAS	1222
CHLOROGONIUM	78	ANABAENA	30	ANKISTRODESMUS	291
OTHER	196	OTHER	61	OTHER	290
TOTAL	1765	TOTAL	1552	TOTAL	6778

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	70.	**********	**********	6465.	6535.
NITROGEN	225.	**********	**********	92050.	92275.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	710.	89.	0.26
NITROGEN	34435.	63.	3.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PILOT DRAIN	0.550	**********	0.210	1.999	**********	**********
SAND BUTTE AQUEDUCT (E1)	0.059	**********	0.186	1.283	**********	**********
SAND BUTTE AQUEDUCT (E2)	0.033	**********	0.047	0.413	**********	**********
UNNAMED CREEK (E1)	0.480	**********	0.119	1.618	**********	**********
UNNAMED CREEK (M1)	0.050	**********	0.089	1.729	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - SEMINOE RESERVOIR (MESOTROPHIC--EUTROPHIC)
COUNTY - CARBON
STORET NO. - 5610 WORKING PAPER NO. 890. NTIS ACCESSION NO. PB-277 036/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	28979.50	48.77	25.6	[illegible].309	342.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
107.	334.	1.3	0.030	0.007	0.130	0.480

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
2.5	0.2 - 4.4 (4)	(5/19/75) P AND N (8/27/75) P AND N (10/16/75) P AND N

SUMMARY OF PHYTOPLANKTON DATA

5/19/75 GENERA	COUNT	8/27/75 GENERA	COUNT	10/16/75 GENERA	COUNT
CHROOMONAS	306	APHANIZOMENON	675	CHROOMONAS	558
GOMPHONEMA	109	CRYPTOMONAS	75	APHANIZOMENON	512
SYNEDRA	66	CHROOMONAS	75		
CENTRIC DIATOM	66	ASTERIONELLA	25		
PENNATE DIATOMS	66	EPITHEMIA	25		
OTHER	87	OTHER	0	OTHER	0
TOTAL	700	TOTAL	875	TOTAL	1070

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	4205.	**********	**********	137495.	141700.
NITROGEN	16940.	**********	**********	1671510.	1688450.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	39285.	72.	2.91
NITROGEN	1634305.	3.	34.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NORTH PLATTE RIVER	31.120	21067.1	0.070	1.066	4.	50.
HURT CREEK	0.042	103.6	0.191	13.929	3.	112.
SAYLOR CREEK	0.160	54.4	0.094	1.236	11.	122.
AUSTIN CREEK	0.359	69.9	0.063	0.939	17.	203.
MEDICINE BOW RIVER	4.910	6055.4	0.144	1.835	5.	50.
TROUBLESOME CREEK	0.242	134.7	0.183	1.849	11.	108.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
O'BRIEN CREEK	0.072	0.971

NAME - SODA LAKE
COUNTY - SUBLETTE
STORET NO. - 5611

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

(EUTROPHIC)

WORKING PAPER NO. 891, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	1.11	******	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
2090.	2472.	2.9	0.063	0.014	0.040	2.520

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
		(8/28/75) N	(10/20/75) N
5.6	6.8		

SUMMARY OF PHYTOPLANKTON DATA

GENERA 8/28/75	COUNT
CYANOPHYTAN COCCOID COL.	221
ELAKATOTHRIX	85
APHANIZOMENON	17
OTHER	0
TOTAL	323

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - VIVA NAUGHTON RESERVOIR (EUTROPHIC)
COUNTY - LINCOLN
STORET NO. - 5612

WORKING PAPER NO. 892. NTIS ACCESSION NO. PB-277 037/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	624.20	5.90	8.9	3.923	170.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
145.	241.	1.8	0.065	0.024	0.120	0.440

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
25.1	**********	(8/ 6/75) N (9/18/75) N (10/16/75) N

SUMMARY OF PHYTOPLANKTON DATA

8/ 6/75 GENERA	COUNT	9/18/75 GENERA	COUNT	10/16/75 GENERA	COUNT
APHANIZOMENON	4430	APHANIZOMENON	4073	APHANIZOMENON	2135
CHROOMONAS	292	SCHROEDERIA	41	CRYPTOMONAS	137
ANACYSTIS(MICROCYSTIS)	243			CHROOMONAS	172
				STEPHANODISCUS	34
OTHER	390	OTHER	0	OTHER	0
TOTAL	5355	TOTAL	4114	TOTAL	2478

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	10.	3940.	3950.
NITROGEN	**********	**********	320.	125965.	126285.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5290.	LOSS	0.67
NITROGEN	19117.	85.	21.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
HAMS FORK	3.780	530.9	0.029	0.936	7.	210.
TRAIL CREEK	0.055	7.5	0.085	1.699	19.	393.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - WOODRUFF NARROWS RES. (EUTROPHIC)
COUNTY - UINTA
STORET NO. - 5613 WORKING PAPER NO. 893. NTIS ACCESSION NO. PB-277 047/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2030.60	7.08	4.9	7.069	58.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
142.	229.	0.8	0.069	0.019	0.105	0.620

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME			
13.0	**********	(5/16/75) N	(8/ 7/75) N	(9/18/75) N	(10/16/75) N

SUMMARY OF PHYTOPLANKTON DATA

5/16/75 GENERA	COUNT	8/ 7/75 GENERA	COUNT	9/18/75 GENERA	COUNT	10/16/75 GENERA	COUNT
FLAGELLATES	7723	MERISMOPEDIA	676	ANABAENA	1144	APHANIZOMENON	205
CHROOMONAS	1296	SCHROEDERIA	386	STEPHANODISCUS	654	STEPHANODISCUS	164
CENTRIC DIATOM	810	CHROOMONAS	145	APHANIZOMENON	327	CRYPTOMONAS	82
CRYPTOMONAS	216	ANABAENA	97	MELOSIRA	122	CHROOMONAS	41
SURIRELLA	54	CRYPTOMONAS	97			SCHROEDERIA	41
OTHER	55	OTHER	48	OTHER	0	OTHER	0
TOTAL	10154	TOTAL	1449	TOTAL	2247	TOTAL	533

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	6685.	**********	**********	35970.	42655.
NITROGEN	17260.	**********	**********	505895.	523155.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	17420.	59.	6.02
NITROGEN	215255.	59.	73.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BEAR RIVER	7.060	1947.7	0.122	1.730	18.	246.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
WHITNEY CANYON CREEK	0.157	1.810
RED CANYON CREEK	0.230	1.441

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WYOMING

NAME - YELLOWTAIL RESERVOIR (MESOTHOPHIC--EUTHOPHIC)
COUNTY - BIGHORN, WY; BIGHORN, CARBON; MT
STORET NO. - 5614
WORKING PAPER NO. 894. NTIS ACCESSION NO. PB-279 255/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	50937.50	51.34	26.8	106.180	158.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
139.	541.	3.4	0.026	0.017	0.310	0.500

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
5.4	0.6	(5/21/75) P (8/29/75) P AND N (10/17/75) P

SUMMARY OF PHYTOPLANKTON DATA

5/21/75 GENERA	COUNT	8/29/ 0 GENERA	COUNT	10/17/ 0 GENERA	COUNT
FRAGILARIA	357	APHANIZOMENON	1728	CHROOMONAS	363
MELOSIRA	268	SKELETONEMA	241	NAVICULA	161
ASTERIONELLA	223	CARTERIA	201	SYNEDRA	81
LYNGBYA	134	ANACYSTIS(MICROCYSTIS)	201	NITZSCHIA	81
NAVICULA	134	CHROOMONAS	201	OSCILLATORIA	40
OTHER	359	OTHER	201	OTHER	100
TOTAL	1475	TOTAL	2773	TOTAL	826

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	6055.	2125.	**********	1040045.	1048225.
NITROGEN	15835.	48840.	**********	5282760.	5347435.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	66965.	94.	20.42
NITROGEN	5064520.	5.	104.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BIGHORN RIVER	64.660	40831.3	0.322	1.513	16.	76.
SHOSHONE RIVER	29.480	6086.5	0.413	2.081	57.	309.
DRY HEAD CREEK	0.300	147.6	0.035	1.296	6.	69.
CROOKED CREEK	0.300	300.4	0.100	1.108	2.	29.